

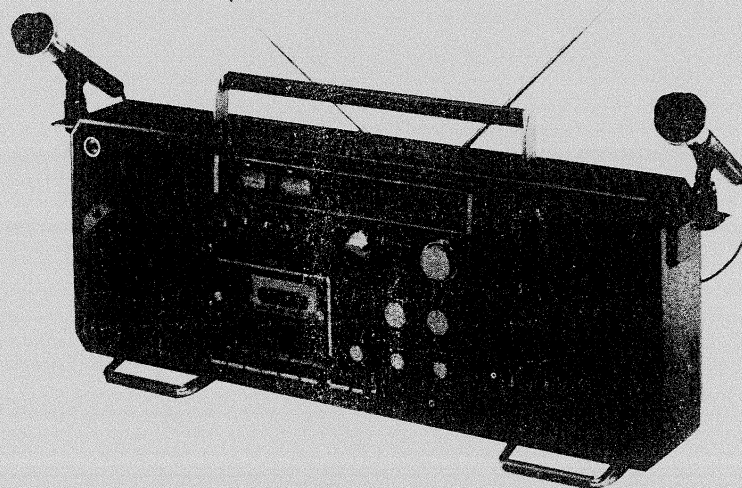
30398
SERVICE MANUAL

CASSETTE RECORDER

SANYO

M9998LU

(METAL TAPE)



SPECIFICATIONS

Recording system	AC bias, 4-track stereo
Erasing system	AC erase, 2-track
Tape speed	4.75 cm/sec (1-7/8 i.p.s.)
Rewind and fast forward time	Rewind: 1 min. 35 sec. (C-60) Fast forward: 1 min. 50 sec. (C-60)
Frequency range	FM: 87.5 - 108MHz SW: 5.95 - 18MHz MW: 525 - 1,605KHz LW: 150 - 285KHz
Terminal impedance	MIC: 10 kohms (0.3mV) PHONO: 50 kohms (3mV) REC/PB: (input) 10 kohms (1mV) (output) 2.7kohms (0.5V) EXT SP: 4 - 8 ohms PHONES: 8 ohms
Frequency response	40 - 12,000Hz (NORMAL) 40 - 15,000Hz (CrO ₂) 40 - 16,000Hz (METAL)
Signal to noise ratio	59 dB (Dolby NR ON) 50 dB (Dolby NR OFF)
Output power	12W x 2 maximum (music power)
Power source	DC: 15V "D" (UM-1) x 10 12-15V Car battery adaptor AC: 115/230V, 50/60Hz
Dimensions	664(W) x 175(D) x 267(H) mm (26-3/16" x 6-15/16" x 10-9/16")
Weight	Approx. 9 kg (19 lbs. 14 ozs.) including batteries

* Specification subject to change without notice.

WM-5659

DISMOUNTING OF CABINET AND CHASSIS

In the first place, take the batteries out of the battery case, or pull off the power cord.

(1) Removing the back lid

Take off 8 screws (pan head tapping screws 3 x 40 mm) from the back lid (of which two are found in the battery case).

Open the back lid, with care not to break the leads inside. Disconnect the lead sockets of the set's PCBs from the back lid's PCBs.

Back lid side		Set side
Beat cancel	2P	A Oscillation PCB (Brown socket)
Speaker selection	2P	B Front socket PCB (Gray-brown socket)
External speaker	4P	C Speaker (Red-black-brown-orange socket)
	2P	D Amp PCB (Red-white socket)
Line out	4P	E Amp PCB (Gray-brown socket)
Red antenna socket	1Px2	F Tuner, switch PCB (Blue-brown socket)
Bandy cord	5P	G Amp PCB
	4P	H Amp PCB
	5P	I Tuner, switch PCB (Blue-gray-brown-red socket)
Power supply PCB		J AMSS PCB

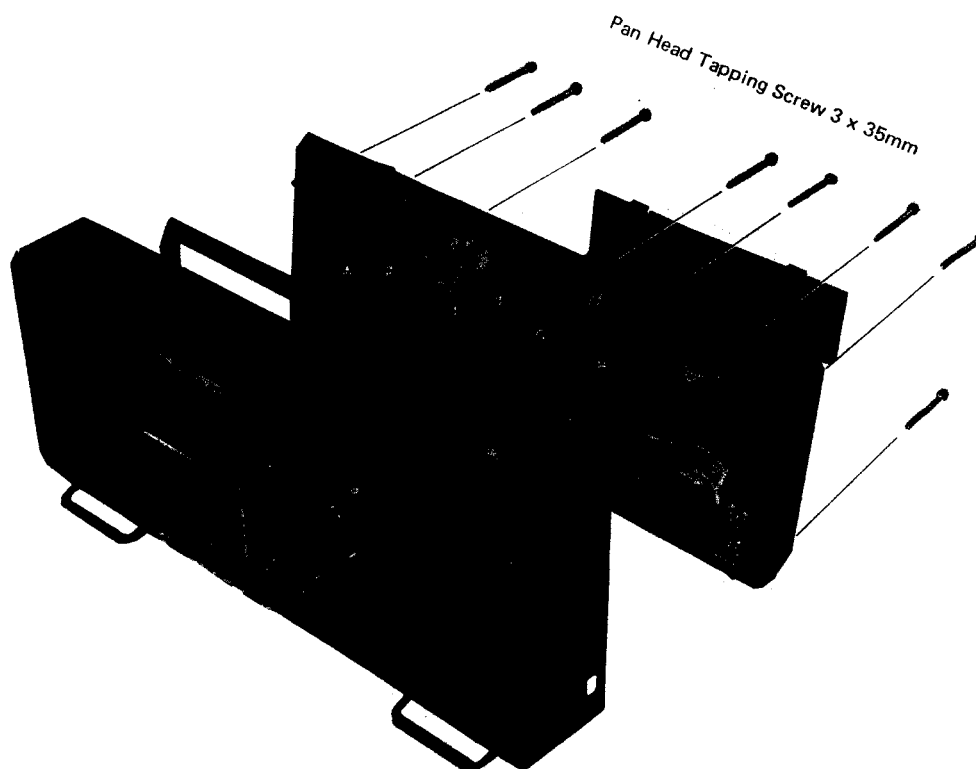
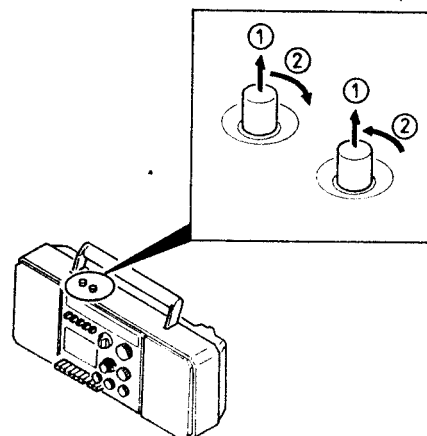
By removing these 10 sockets, the back lid can be taken off.

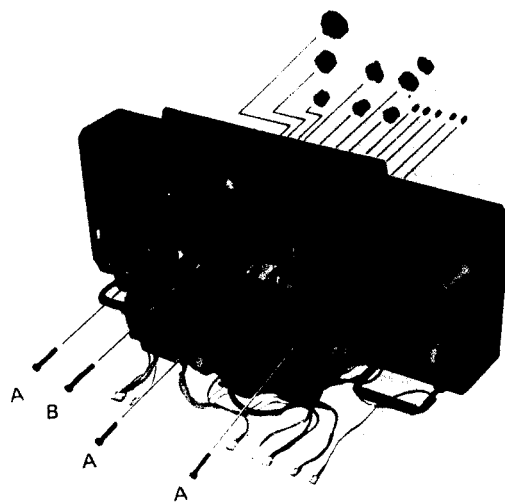
(2) Removing the Cabinet

Remove all control knobs and levers. Pick up power button and battery check/dial light button, and turn them clockwise and counterclockwise (sketch) respectively, then these buttons will be locked in raised positions.

Take off 4 red screws (3 pan head tapping screws 3 x 30 mm, 1 pan head tapping screw 3 x 40 mm) which are joining the chassis and the cabinet together. Separate the microphone socket from the amplifier PCB, and remove screw 209 (pan head tapping screw 3 x 8 mm) from the oscillation PCB (110). Disconnect the three sockets of LED PCB (106) from the AMSS PCB (107).

Lifting the chassis a little, dismount the chassis from the cabinet. Now, the chassis and the cabinet are separated from each other.





A Pan Head Tapping Screw 3 x 30mm
B Pan Head Tapping Screw 3 x 40mm

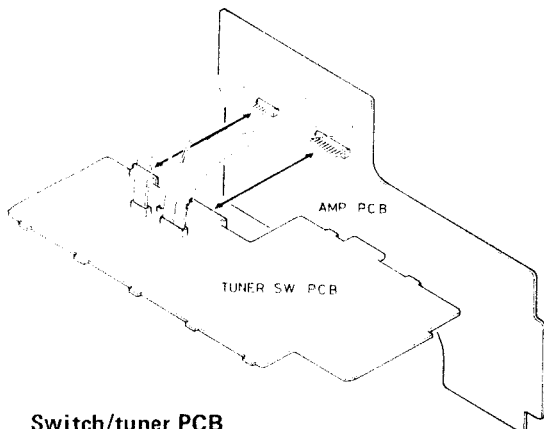
(3) Removing the printed circuit board (Referring only the AMP PCB and tuner/switch PCB)

Amplifier PCB

To dismount the AMP PCB, take off 5 screws (pan head tapping screw w/washer 3 x 12 mm) and 2 lugs, 136 and 138 (for shaping up the leads), from the chassis. Since the AMP PCB is connected to the tuner/switch PCB with plugs, it can be separated off by pulling it toward you.

NOTE:

When mounting the AMP PCB, assemble with care so that the AMP side plug may be fitted well with the tuner side socket.



Switch/tuner PCB

After dismounting the AMP PCB, take off three screws (a pan head tapping screw w/washer 3 x 8 mm, two pan head tapping screws 3 x 8 mm) from the tuner/switch PCB. Remove the hexagon head bolt (2.6 x 16 mm) from the dial drum (66) and separate the spring coil (67) for rope threading from the drum. Glue with adhesive cellophane tape, and pull toward the outside, then the switch/tuner PCB will come out loose. Pull out the PCB along the chassis groove with care not to damage the leads, then the disassembly is complete.

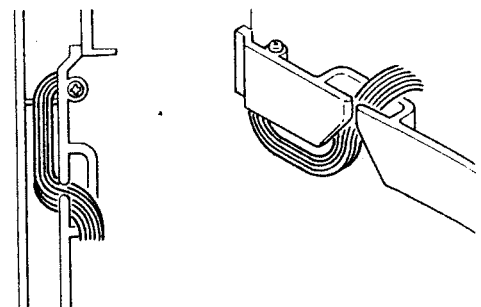
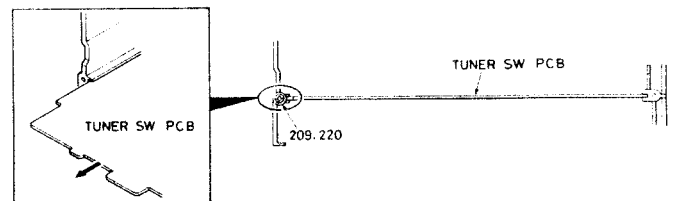
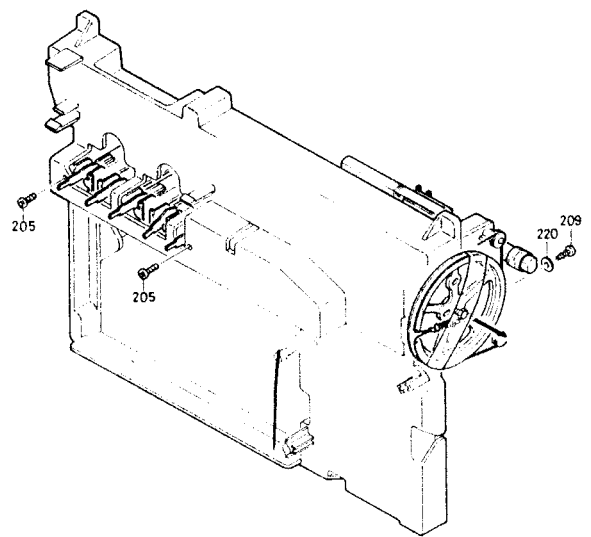
NOTE:

When dismounting the tuner/switch PCB, be careful not to separate the connection bandy cord from the amplifier PCB.

NOTE:

When reassembling the chassis into cabinet, arrange the leads coming from the VR PCB as illustrated above. Unless arranged as specified, the chassis may not settle home in the cabinet or the leads may be pinched and cut by the chassis and cabinet.

* Before checking or repairing the AMP PCB or tuner/switch PCB, make sure other smaller PCBs (INPUT PCB, OUTPUT PCB, OSCILLATION PCB, AMSS PCB, VR PCB) are properly connected.

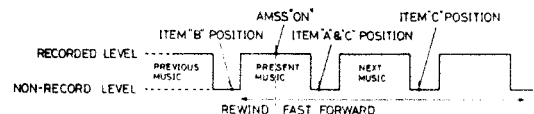


AMSS: HOW DOES IT WORK?

AMSS stands for Automatic Music Select System, and it is intended to search for the start of a desired music automatically by making use of the unrecorded (no-signal) segment between recorded tunes in a pre-recorded music tape.

Method of use

- A. In playback mode, to skip the tuner being reproduced and play back the next tune:
 - (1) Press AMSS button. (The button is locked.)
 - (2) Press FF-Cue/AMSS button. (This button is locked to fast-forward the tape. At this time AMSS indicator flickers to tell the tape running direction.)
 - (3) Reaching the end of the tune being reproduced, the FF-Cue/AMSS button only is reset automatically, and the playback of the next tune is started after running through the unrecorded segment.
- B. In playback mode, to repeat the tune being reproduced:
 - (1) Press AMSS button. (The button is locked.)
 - (2) Press REW-Review/AMSS button. (This button is locked to rewind the tape. At this time, the other AMSS indication flickers to tell the tape running direction.)
 - (3) Returning to the start of the tune being reproduced, the REW-Review/AMSS button only is reset automatically, and the playback of the same tune is repeated immediately.
- C. In playback mode, to skip several tunes to search for a desired one:
 - (1) Manipulate as in A-(1).
 - (2) Manipulate as in A-(2) and A-(3) repeatedly until the desired tune is located.



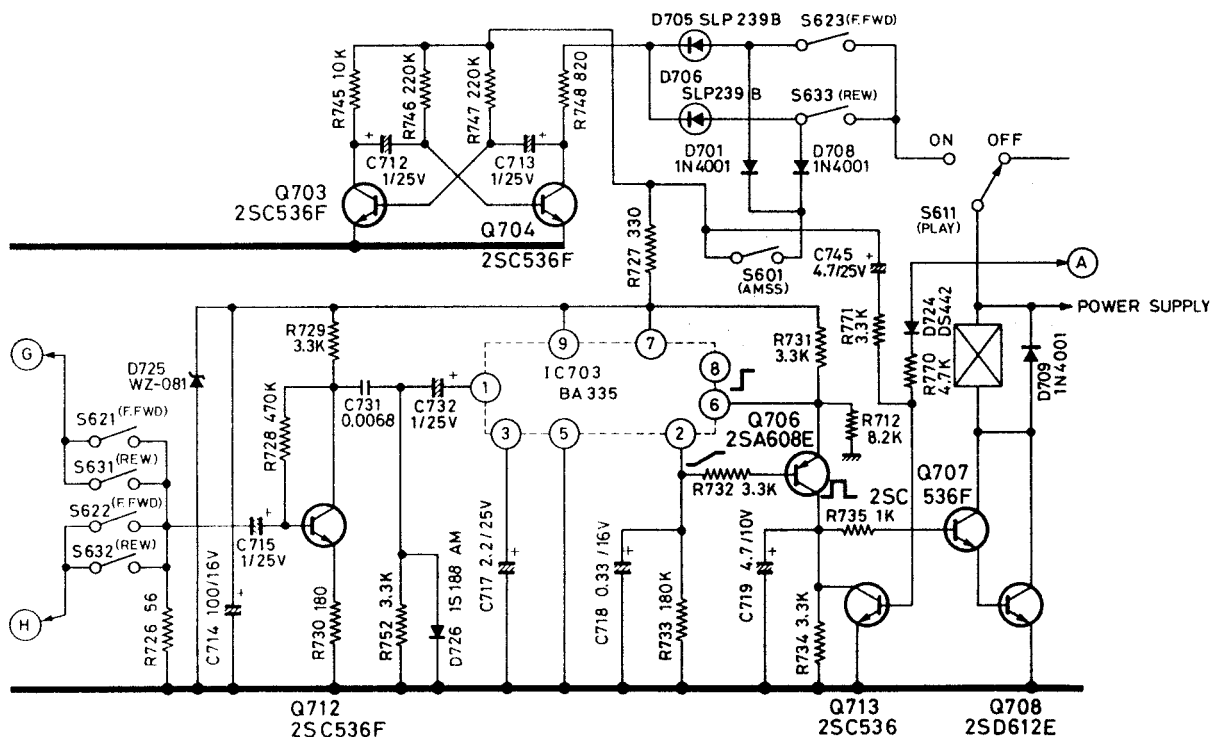
Circuit description

Main behavior

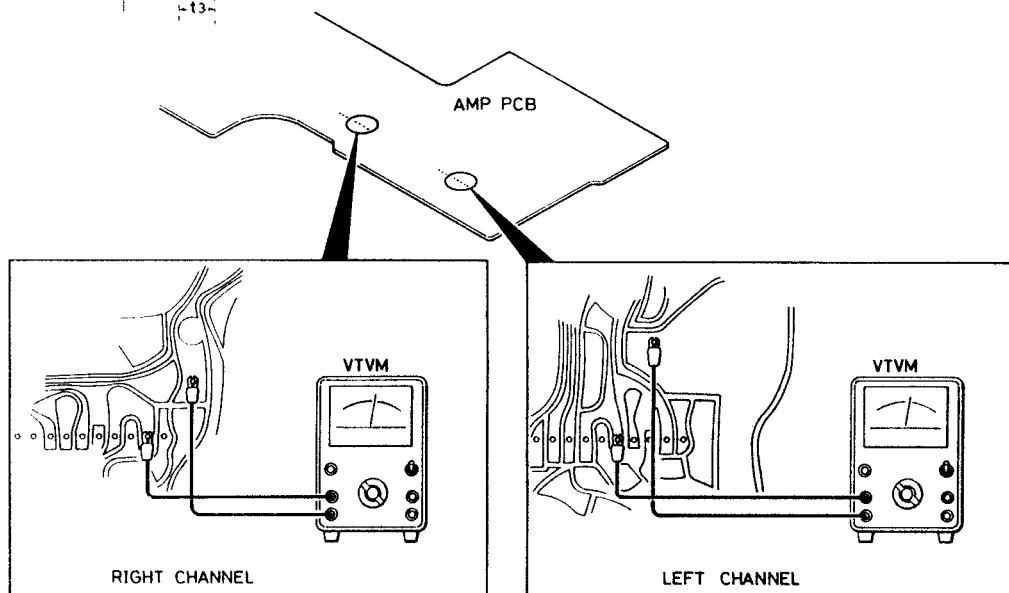
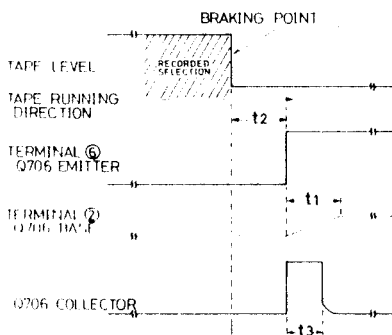
Playback signals from the head are detected in the level detector circuit. When unrecorded level is found, a single shot pulse is generated to operate the plunger.

Briefing on circuits

- (1) Pressing of play button will cause switch S611 to turn on.
Pressing of AMSS button will cause switch S601 to close.
When FF-Cue/AMSS or REW-Review/AMSS button is pressed, switch S623 or S633 will close.
Then, voltage V_{CC} is supplied into circuits.
- (2) Transistors Q703, Q704 are astable multivibrator circuits; when switch S623 or S633 is closed, the power is supplied, and the circuit is activated to be in oscillating state, while either LED (D705 or D706) of tape running direction indicator flickers according to the switch operation. Diodes D707, D708 are intended to prevent over-current.



- (3) In playback mode, the audio sources (playback signals) detected by right and left heads are fed into (G) and (H) by way of tape equalizer amplifier and Dolby amplifier.
 - (4) When FF-Cue/AMSS or REW-Review/AMSS button is pushed in, switches S621, S622, or S631, S632 are closed.
 - (5) Transistor Q712 amplifies the audio sources in the AF (audio frequency) amplifier.
 - (6) Capacitor C731 and resistor R730 compose a low-cut filter in order to eliminate the low frequency components of audio sources.
 - (7) IC703 comprises circuits for AM amplifier, AC-DC converter, comparator and others, being designed to amplify the audio sources again, detect the level, and form pulses.
- The following waveforms are delivered to terminals No. 2 (C, R) and No. 6 (Tr-Out).
- (8) Transistor Q706 is switched on and off due to the differential voltage of emitter and base, composing single-shot pulse in the collector. Times t_1 , t_2 , t_3 are set by the time constant of capacitor C718 and resistor R733.
 - (9) Transistor Q713 prevents erroneous actions in switch operations in the muting circuit.
 - (10) Transistors Q707 and Q708 are linked by Darlington connection, of which single-shot pulses of small current are used to drive the plunger.
 - (11) When the plunger starts to move, the slide (123) of the mechanism is pulled, so that the FF-Cue/AMSS or REW-Review/AMSS button locked in item (1) will be reset.
- Diode D709 is designed to prevent counter-electromotive current during plunger movement.



AMPLIFIER ADJUSTMENTS

Prepare

Power source	DC 15V
Mode switch	STEREO
Dolby NR/ALC switch	OFF
Selector switch	TAPE
Tape switch	NORMAL
Loudness switch	OFF

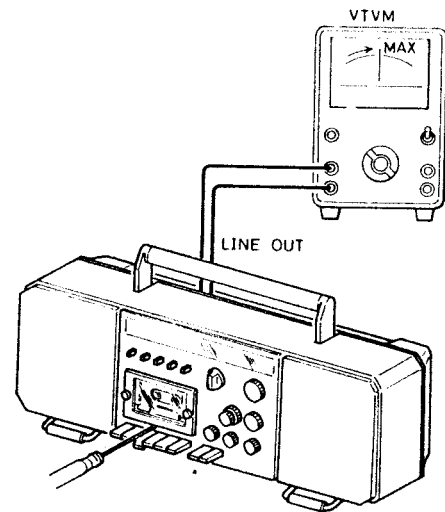
Head azimuth

Tape to be used; (10 kHz, -10 dB)

Load a test tape and press the PLAY button.

Adjust the head azimuth screw so the LINE OUT level becomes maximum.

Repeat the adjustment on both channels and both sides of



Adjustment of playback level

Play back Dolby test tape MTT-115 0dB (TEAC Dolby level calibration tone 200 nWb/m).

Adjust controls SVR801 (L-ch) and SVR901 (R-ch) until the output level from measuring test point becomes 0.58 V.

* Measuring test point means ...

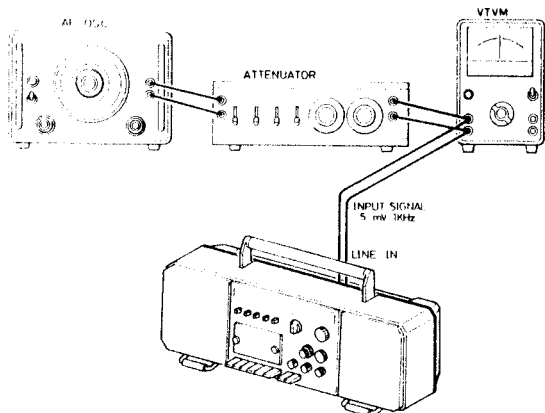
The line (common terminals of record/playback switch of S806 and S906) on point 7 of Dolby IC (LM1011N Dolby), IC801, IC901, and the ground.

Adjustment of record/playback frequency response (Bias adjustment)

Feed input signal of 5 mV (−46 dB) 1 kHz into the line input terminal. Turn the input control knob until the output at measuring test points (see above) becomes 40 mV. Under this condition, turn SVR701 and SVR702 until the difference between record output playback output becomes 0 whether the signal is 1 kHz or 10 kHz.

NOTE:

When adjusting, set the signal of line input at "OFF" state.

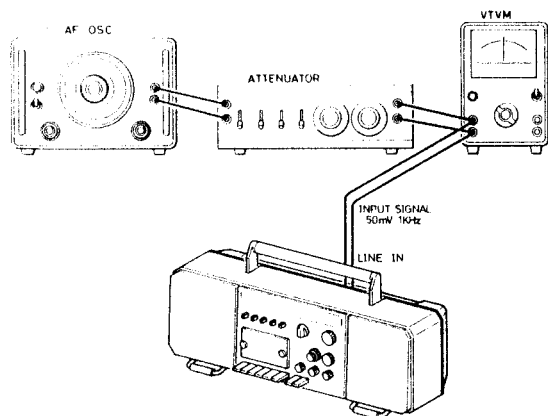


Adjustment of record and playback levels

Feed input signal of 50 mV (−26 dB) 1 kHz into the line input terminal. Turn the input control knob until the output at measuring test points (see above) becomes 0.58 V. Record, Adjust SVR802 and SVR902 so that the record input becomes equal to the playback output.

NOTE:

When playing back, set the signal of line input at "OFF" state.



Adjustment of ALC balance

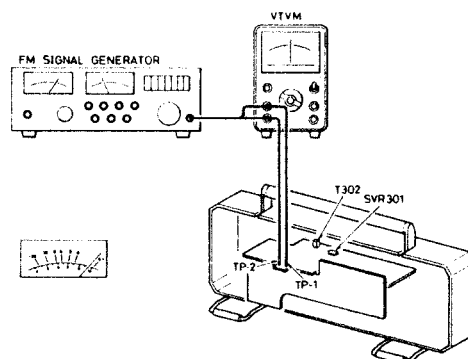
Turn on ALC switch.

Feed input signal of 500 mV (−6 dB) into the line input terminal. Set in record mode. Adjust by turning SVR703 until levels at measuring test points become uniform.

Adjustment of tuning meter

Feed input signal of 98 MHz, 66 dB into the set. Tune in the reception frequency of the set. Adjust SVR301 (10 kΩ) so that the meter swings up to graduation 9.5.

- (1) If the meter swing becomes larger as the input is being increased, adjust after raising the input until the meter is stabilized.
- (2) If the maximum point of meter swing does not coincide with the maximum output point, turn off AFC switch (to short-circuit TP4 and shield case), and tune in to the maximum point of meter swing. In this setting, adjust T302 to obtain the maximum output. At this time, keep the input at 50 dB.



Adjustment of FM MPX (multiplex)

- (1) Set SVR501 (10 kΩ) in the central position.
- (2) Apply modulation input into FM SG through stereo modulator. (* Modulation frequency is 400 Hz.)

Pilot signal	7.5 kHz dev. (10% mod.)
Stereo signal	22.5 kHz dev. with "main" signal (30% mod.)

NOTE:

Since the method of adjusting the modulation differs from one instrument to another, learn the method for the instrument you are going to use.

- (3) Keeping the output signal switch of stereo modulator at MAIN (L + R), set the radio's reception frequency to 98 MHz, and tune in with FM SG. (* Output of FM SG is 66 dB.)
- (4) 19 kHz adjustment (V.C.O. adjustment)

In FM stereo mode, connect frequency counter to TP6, and cut the output of stereo modulator to set in no-modulation state. Turn SVR501 (10 kΩ) to adjust to 19 kHz ± 50 Hz.

* No-modulation state: Turn off PILOT and MAIN & SUB of output signal switch.

Adjustment in no-input state is difficult because 19 kHz signals fluctuate due to noise component, but it is possible to adjust in away that the average of indications be 19 kHz ± 50 Hz.

- (5) Adjustment of separation
- Turn tone controls to minimum. Set the balance control in the middle point.
 - Turn on MAIN & SUB signal switch and PILOT signal switch, and set the output signal switch to "MAIN" position.
 - Connect VTVM to external speaker terminal. (Connect to right and left jacks of external speaker terminal recording to the adjustment or right and left channels.)
 - Turning volume controls, adjust the output of both right and left channel to the standard output (50 mW).
 - Turn on the RIGHT side and turn off the LEFT side of output signal switch. Adjust SVR502 (1 k Ω) so as to minimize the LEFT side leakage output.
 - Turn on the LEFT side and turn off the RIGHT side of output signal switch. Adjust SVR502 so as to minimize the RIGHT side leakage output. If the position of adjustment coincides with that in item 5) above, this is the completion of adjustment.
 - If the position of adjustment of SVR502 differs from the right channel to the left channel, adjust so that the separation of both channels becomes nearly equal to each other.

NOTE:

Separation, in both channels, should be:

More than 20 dB at 400 Hz, 1 kHz

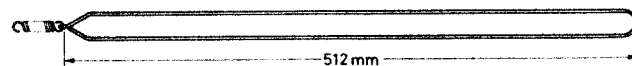
More than 10 dB at 10 kHz

Adjust the separation after adjusting the meter.

THREADING OF DIAL ROPE

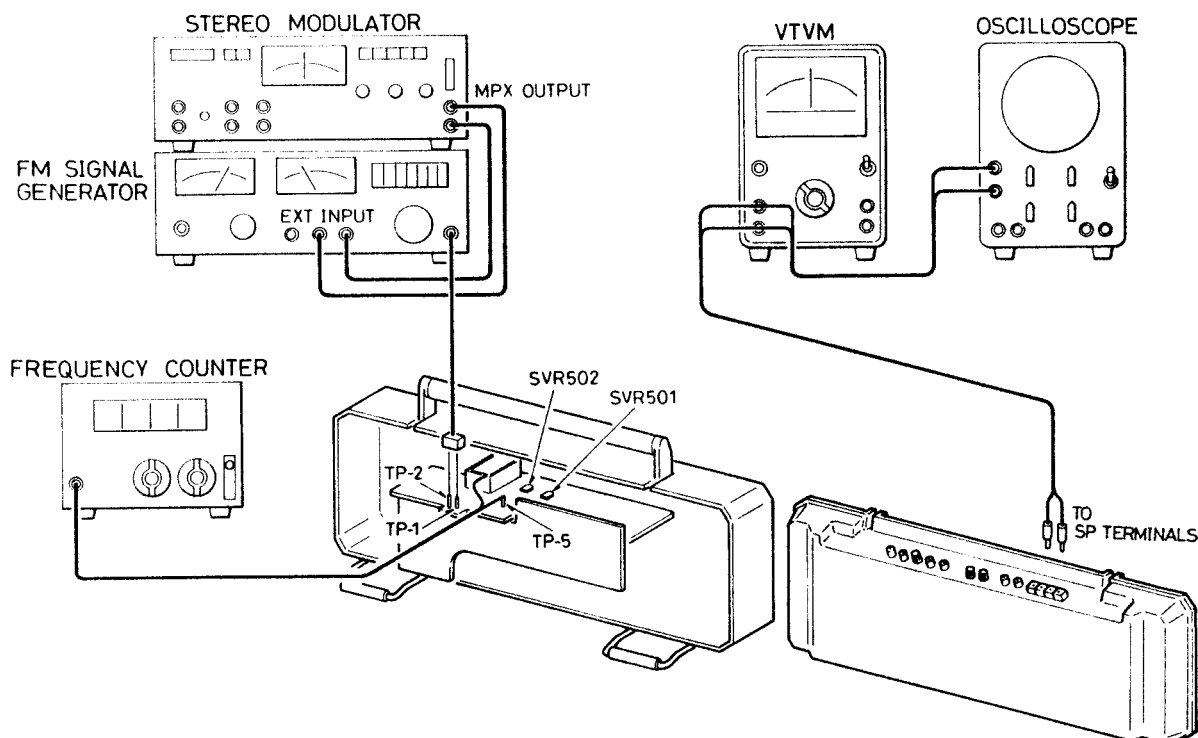
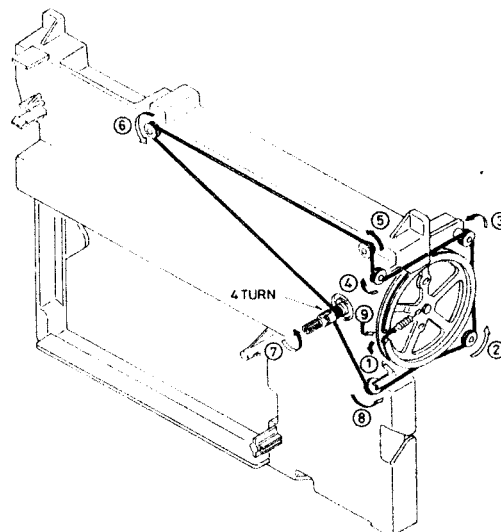
Preparation

Tie the rope to spring coil (67) of drum (66) in a folded length of 512 mm.



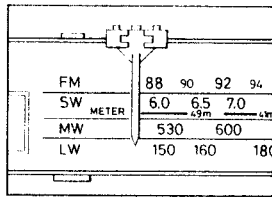
Procedure

Mount the spring coil with rope on the drum, and thread the rope in the direction of arrows (in the numerical sequence). After winding four turns on the tuning shaft, return to the spring coil of the drum.

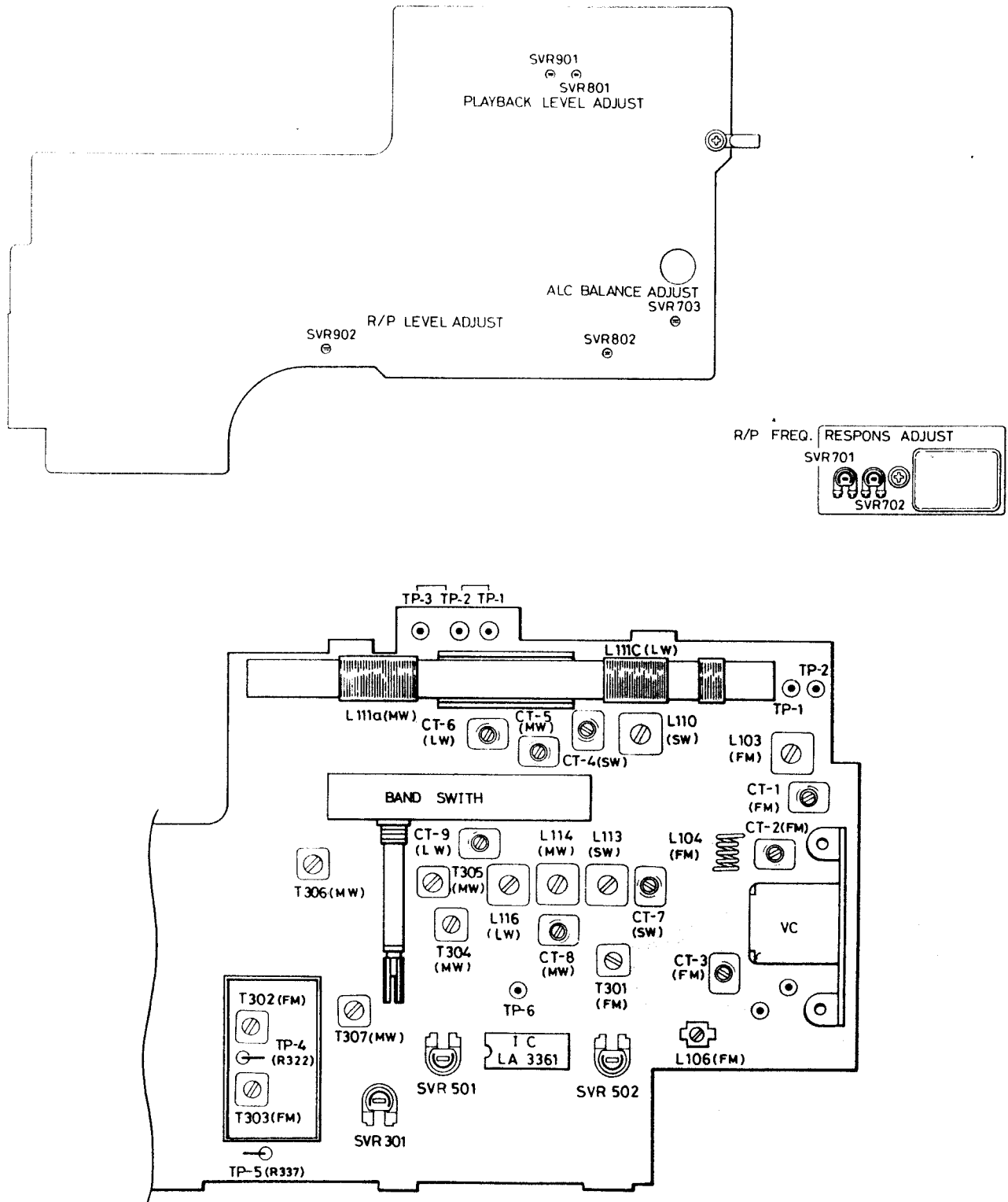


Pointer position adjustment

Rotate the tuning shaft counterclockwise until it turns idle, fit the pointer to the left end point, and secure it firmly.



PARTS LOCATION



TUNER ADJUSTMENT

* DC voltage is 15V and Speaker Impedance 3 ohms. Output Power 50mW.

MW ADJUSTMENT

Step	Adjusting Circuit	Connections		SG frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	I.F.T.	Connect sweep generator to Test Loop	Connect oscilloscope to EXT. SP terminals.	460 KHz (400 Hz 30% modulation)	Low end of dial scale under no station signal.	T304~T307	MAX.
2	OSC.	Connect AM SG to Test Loop	Connect VTVM to speaker terminals.	505 KHz (400 Hz 30% modulation)	Low end of dial scale.	L114	
3				1650 KHz (400 Hz 30% modulation)	High end of dial scale.	CT8	
4	ANT.	Connect AM SG to Test Loop.	Connect VTVM to speaker terminals.	600 KHz (400 Hz 30% modulation)	600 KHz on dial scale.	L111a	MAX.
5				1400 KHz (400 Hz 30% modulation)	1400 KHz on dial scale.	CT5	
6	Repeat adjustments.						

- PREPARE: 1. Set the dial pointer to very left line of dial scale.
 2. Connect sweep generator, AM SG, VTVM and oscilloscope.
 3. Selector switch to "MW".
4. Use a screwdriver with plastic grip for all adjustments.
 5. Use a dummy of back lid and Rod antenna, adjust tracking points.

LW ADJUSTMENT

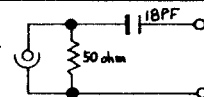
Step	Adjusting Circuit	Connections		SG frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	OSC.	Connect AM SG to Test Loop.	Connect VTVM to speaker terminals.	145 KHz (400Hz 30% modulation)	Low end of dial scale.	L116	MAX.
2				295 KHz (400 Hz 30% modulation)	High end of dial scale.	CT9	
3	ANT.	Connect AM SG to Test Loop.	Connect VTVM to speaker terminals.	160 KHz (400 Hz 30% modulation)	160 KHz on dial scale.	L111c	MAX.
4				280 KHz (400Hz 30% modulation)	280 KHz on dial scale.	CT6	
5	Repeat adjustments.						

- PREPARE: 1. Set the dial pointer to very left line of dial scale.
 2. Connect sweep generator, AM SG, VTVM and oscilloscope.
 3. Selector switch to "LW".
4. Use a screwdriver with plastic grip for all adjustments.
 5. Set the Fine Tuning to mechanical center.
 6. Use a dummy of back lid and Rod antenna, adjust tracking points.

SW ADJUSTMENT

Step	Adjusting Circuit	Connections		SG frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	OSC.	Connect AM SG. to ANT terminal through dummy.	Connect VTVM to EXT. SP. terminals.	5.8 MHz (400Hz 30% modulation)	Low end of dial scale.	L113	MAX.
2				19 MHz (400Hz 30% modulation)	High end of dial scale.	CT7	
3	ANT.	Connect AM SG. to ANT terminal through dummy.	Connect VTVM to EXT. SP. terminals.	7.0 MHz (400 Hz 30% modulation)	7.0 MHz on dial scale.	L110	MAX.
4				18.0 MHz (400 Hz 30% modulation)	18.0 MHz on dial scale.	CT4	
5	Repeat adjustments.						

- PREPARE: 1. Set the dial pointer to very left line dial scale.
 2. Connect signal generator to dummy antenna.
 3. Use screwdriver with plastic grip for all adjustments.
4. Selector switch to "SW"
 5. Set the Fine Tuning to mechanical center.
 6. Use a Dummy antenna as follow.



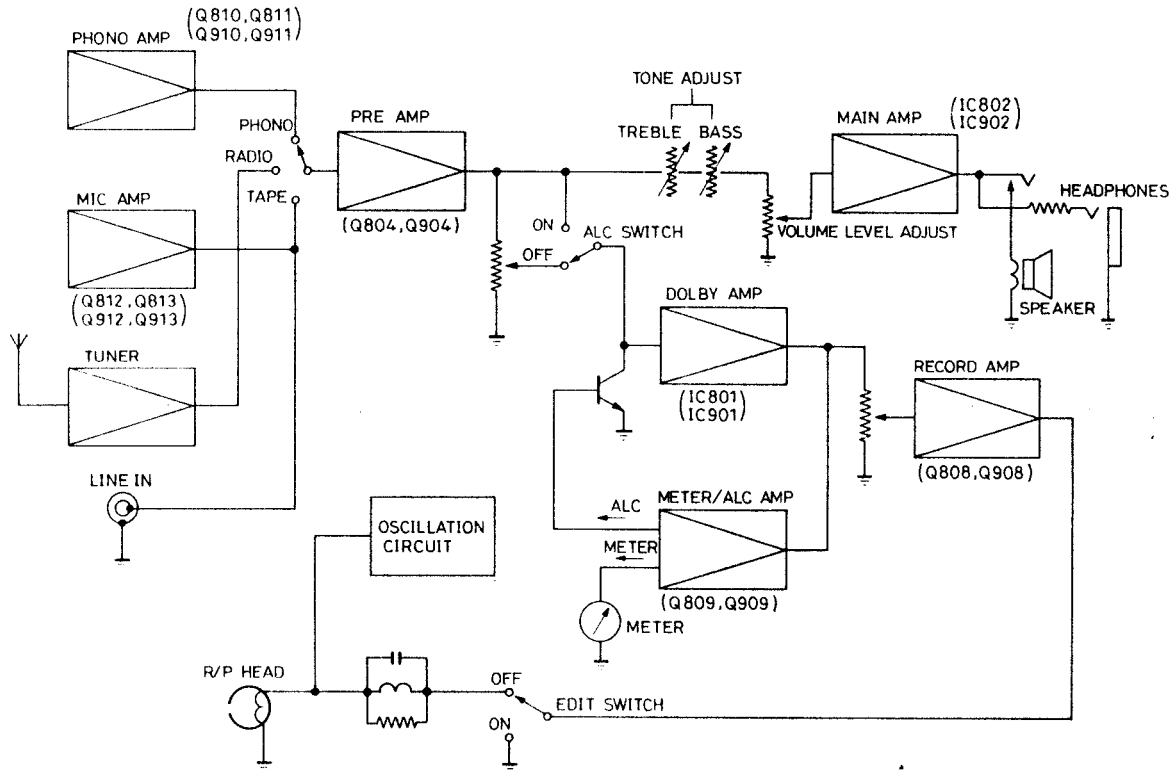
FM ADJUSTMENT

Step	Adjusting Circuit	Connections		SG frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	I.F.	Connect sweep generator to FM TP1 (H) & TP2 (E)	Connect oscilloscope to TP4 (H) & shield plate (E).	10.7 MHz (0% modulation)	Near max. capacitance tuning gang under no station signal.	T301, T302	Set a ceramic filter center.
2	Ratio Det.		Connect oscilloscope to TP5 (H) & shield plate (E).			T303	
3	OSC.	Connect FM SG to TP-1 (H) & TP-2 (E)	Connect VTVM to speaker terminal.	87.25 MHz (400 Hz 30% modulation)	Low end of dial scale.	L106	MAX.
4				109.0 MHz (400 Hz 30% modulation)	High end of dial scale.	CT3	
5	ANT.	Connect FM SG to TP-1 (H) & TP-2 (E)	Connect VTVM to speaker terminal.	90.0 MHz (400 Hz 30% modulation)	90.0 MHz on dial scale.	L103, L104	MAX.
6				106.0 MHz (400 Hz 30% modulation)	106.0 MHz on dial scale.	CT1, CT2	
7	Repeat adjustments.						

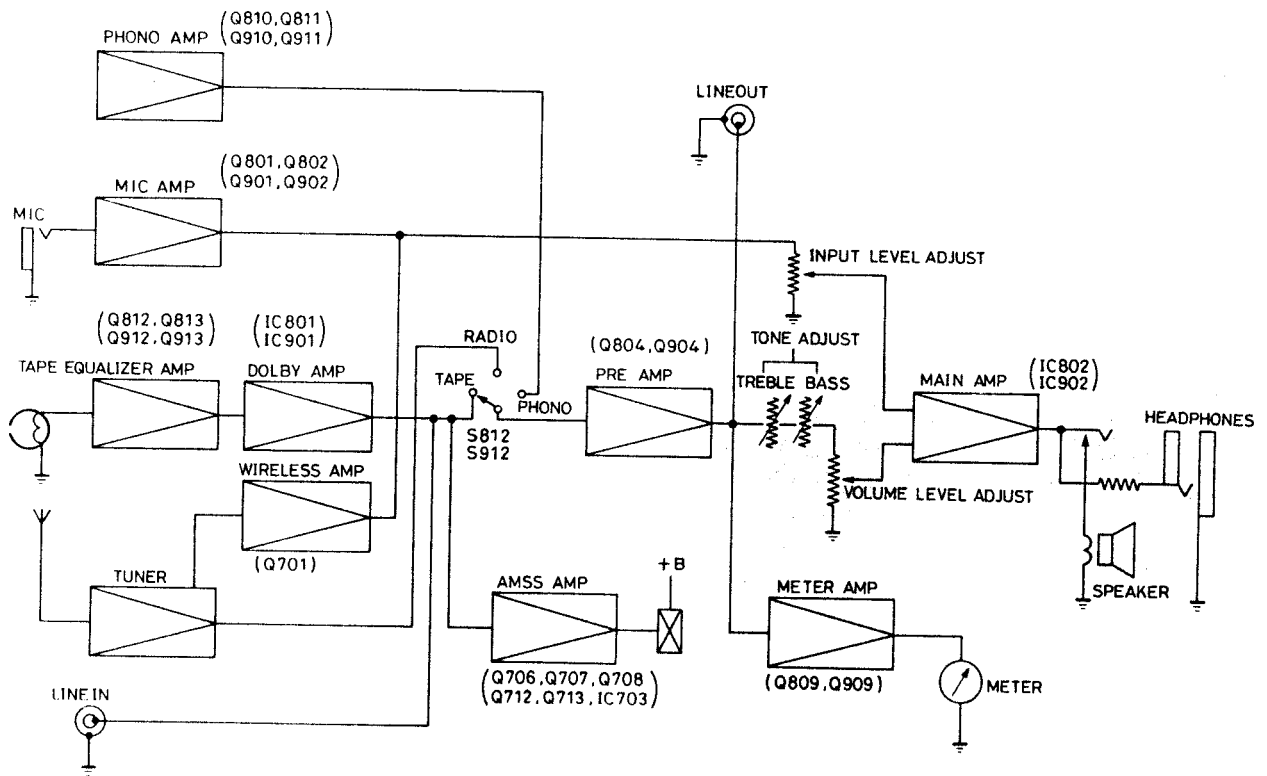
- PREPARE: 1. Set the dial pointer to very left line of dial scale.
 2. Connect sweep generator, FM SG, VTVM and oscilloscope. FM antenna input impedance is 300 ohm.
 3. Use a screwdriver with plastic grip for all adjustments.
 4. AFC switch OFF.

BLOCK DIAGRAM

RECORD BLOCK DIAGRM



PLAYBACK BLOCK DIAGRAM



MECHANISM ADJUSTMENT

1. TAKE-UP TORQUE

Set the unit to PLAY, F.FWD or REW mode.

Measure each torque with a torque gauge.

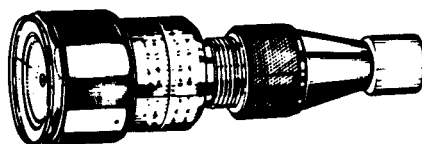
Each torque should be as follows;

PLAY 35 — 60 g/cm

FAST FORWARD 70 — 130 g/cm

REWIND 70 — 130 g/cm

If each torque fails to reach the standard value, clean the drive belt, flywheel, motor pulley, take-up reel idler and rewind roller with a cotton swab soaked in alcohol.



2. BACK TENSION

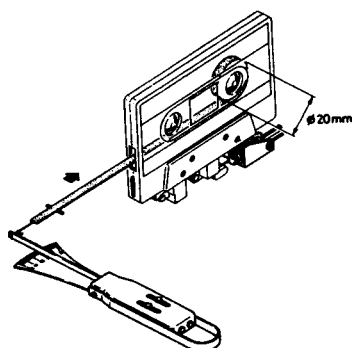
To measure back tension with tension gauge, make a hole in the side of the cassette as shown in figure two.

Be sure the tape does not rub against the edge of the cassette, or correct measurement will be impossible.

PLAY Less than 5 g/cm

FAST FORWARD Less than 5 g/cm

REWIND Less than 5 g/cm



3. TAPE TENSION

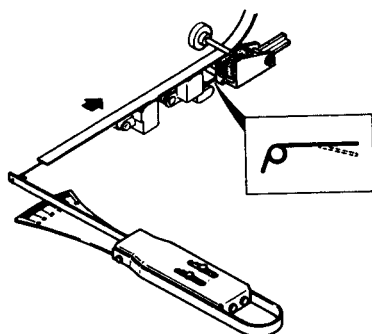
Cut off a length of tape. Tie one end to a thread connected to the tension gauge, and leave the other end hanging loose as shown in figure three.

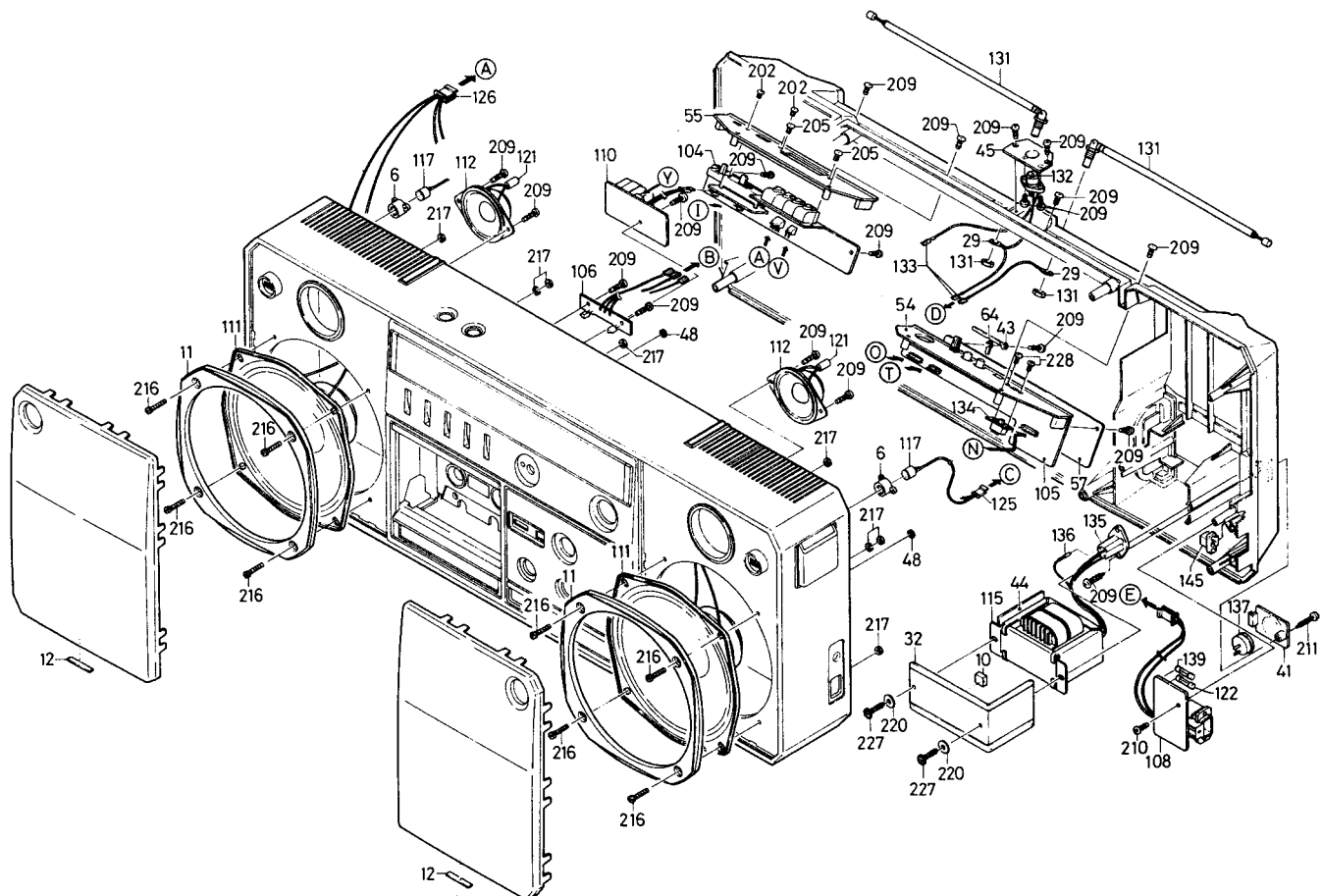
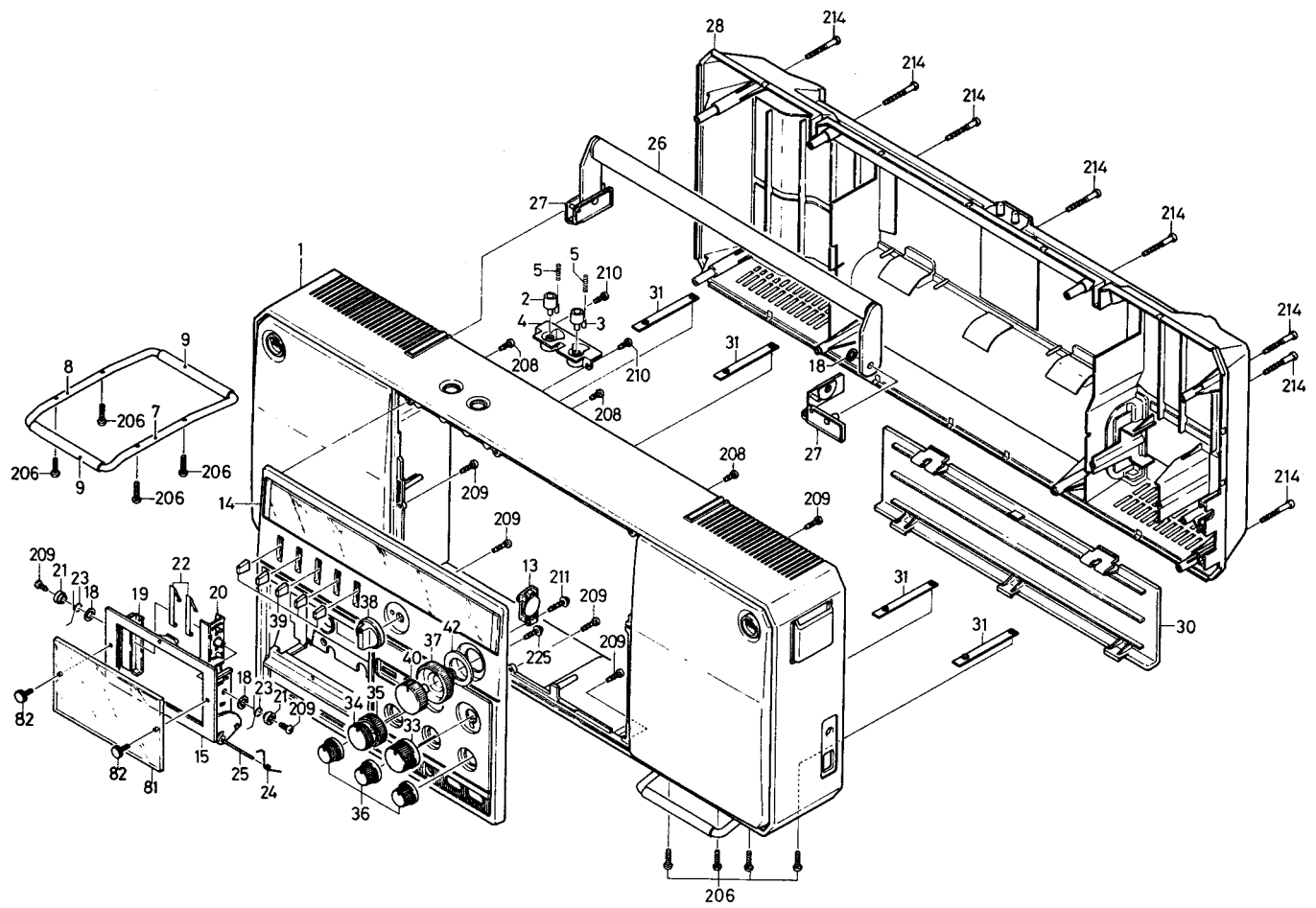
Operate the unit in PLAY mode and hold the tension gauge steady.

When the tape stops, read the tension gauge. If this reading is over 120 gram, no adjustment is needed.

If it is under 120 gram, adjust the pinch-roller pressure.

This is done by bending the spring wire 32 (141-2-852T-55700) shown in the mechanism exploded view. Clean the pinch roller with alcohol so the tape will not slip.





PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKING			
	141-6-133T-02307	Individual Carton	1
	141-6-410T-30604	Instruction Manual	1
	141-6-144T-56800	Form Plastic Case, Left	1
	141-6-144T-56900	Form Plastic Case, Right	1
	141-6-144T-54100	Form Plastic Case, Center	1
	141-2-171T-15400	Handle	1
	141-6-231T-90600	Inner Polye Cover, Set	1
	141-6-231T-20350	Inner Polye Cover, Inst. B	1
	141-2-332T-00300	Sleeve, Battery	2
	141-2-135T-62100	Cover, Jack	1
	141-6-317T-10900	Pad	1
	141-0-385T-02900	Bracket Assy, Mic	2
	141-6-231T-15300	Inner Polye Cover, Mic	2
	141-6-231T-10200	Inner Polye Cover, Mic Stand	2
	141-6-479T-08300	Label, Dolby	1
	141-6-132T-90300	Individual Carton, Mic	1
	141-6-176T-00201	Band, Carton	1
ACCESSORY			
	4-241T-10891	Cassette Tape C-12	1
	4-153T-10700	Microphone, W/O Remote	1
	4-153T-10800	Microphone, W/Remote	1
	4-243T-77900	Power cord	1
CABINET			
1	141-0-111T-39302	Cabinet Ass'y	1
2	141-2-161T-61800	Push Button, Power	1
3	141-2-161T-61830	Push Button, Dial	1
4	141-2-210T-11300	Bracket, Push Button	1
5	141-2-855T-34000	Spring Coil, Push Button	2
6	141-2-385T-02200	Bracket, Mic	2
7	141-2-174T-08000	Stand, Leg	2
8	141-2-174T-08100	Stand, Leg	2
9	141-2-461T-34400	Pipe, Leg	4
10	141-2-447T-66100	Cushion, 5 x 10 x 10mm, PT	1
11	141-2-153T-50000	Escutcheon, Speaker	2
12	141-2-246T-61800	Sheet, 4 x 30 x 1mm, Fiber	4
13	141-0-581T-10901	Gear Ass'y	1
14	141-0-122T-28905	Front Panel Ass'y	1
15	141-0-124T-24100	Top Lid Ass'y	1
18	141-2-453T-31001	Washer, 8.2 x 12 x 0.5mm, Nylon	2
19	141-2-210T-10600	Bracket, Cassette Holder	1
20	141-2-210T-10700	Bracket, Cassette Holder	1
21	141-2-135T-59200	Cover, Bracket	2
22	141-2-853T-61100	Spring Plate, Cassette Pres	2
23	141-2-852T-53100	Spring Wire, Bracket	2
24	141-2-852T-56801	Spring Wire, Top Lid	1
25	141-2-753T-63700	Shaft, Top Lid	1
26	141-0-171T-15100	Handle Ass'y	1
27	141-2-271T-14600	Bracket, Handle	2
28	141-0-126T-28908	Back Lid Ass'y	1
29	123-2-472R-11100	Lug, Rod ANT	2
30	141-0-128T-14000	Battery Lid Ass'y	1
31	141-2-411T-10600	Plate Nut, Leg	4
32	141-2-322T-51900	Shield Plate, PT	1
33	141-2-163T-60100	Rotary Knob, Main VR	1
34	141-2-163T-60200	Rotary Knob, Mic VR	1
35	141-2-163T-60300	Rotary Knob, Mic VR	1
36	141-2-163T-60400	Rotary Knob, Bass/Treble	3
37	141-2-163T-65800	Rotary Knob, Tuning	1
38	141-2-163T-60600	Rotary Knob, Band Select	1
39	141-0-162T-16100	Lever Knob Ass'y	5
40	141-2-163T-65700	Rotary Knob, Fine Tuning	1
41	141-2-132T-03800	Sign window, Voltage select	1
42	141-2-453T-61901	Washer	1
44	141-2-246T-42700	Sheet, 35 x 40, Fiber, PT	1
45	141-2-367T-33600	Bracket, EXT ANT socket	1
46	141-2-447T-47100	Cushion, 10 x 30 x 10t	1
47	141-2-464T-08700	Fixer	8
48	141-2-453T-04600	Washer, Fiber 3 x 6 x 1	2
49	141-2-453T-01200	Washer, Fiber 3 x 8 x 1, Rec shaft	1
51	141-2-742T-36200	Lever, REC	1
52	123-2-566R-12000	Tuning Shaft	1

Ref. No.	Part No.	Description	Q'ty
CHASSIS			
53	141-2-363T-09800	Bracket, VC	1
54	141-0-367T-32002	Bracket Ass'y, Socket	1
55	141-2-367T-32101	Bracket, SP Socket	1
56	141-2-368T-17800	Heat Sink, IC	1
57	141-2-322T-52300	Shield Plate	1
58	141-2-311T-31300	Chassis	1
59	141-0-146T-22601	Dial Scale Ass'y	1
60	141-2-245T-07101	Back Plate	1
61	141-2-661T-24600	Pulley	6
62	141-2-567T-02000	Pulley Shaft	5
63	141-2-567T-02100	Pulley Shaft	1
64	123-2-472R-00401	Lug	1
65	141-2-464T-20671	Fixer	8
66	141-2-538T-03900	Drum	1
67	141-2-851T-06300	Spring Coil, Rope	1
68	141-2-340T-00500	Rope	1
69	141-0-511T-13301	Pointer Ass'y	1
70	141-2-453T-00800	Washer, 3 x 8 x 0.5mm	2
71	141-2-361T-16100	Bracket, VR	1
72	141-2-367T-32200	Bracket, Socket	1
73	141-0-715T-05300	Bracket Lever Ass'y, REC	1
74	141-2-742T-36300	Lever, REC	1
75	141-2-853T-62200	Spring Plate, REC	1
76	141-2-453T-01700	Washer, 3 x 10 x 1mm, Fiber	1
77	141-2-374T-14600	Bracket, Pilot	1
78	141-2-365T-42400	Bracket, Edit Switch	1
79	141-2-365T-42500	Bracket, AMSS Switch	1
80	141-2-253T-16300	Joint, Band Select Switch	1
81	141-2-131T-19800	Clear Window, Top Lid	1
82	141-2-421T-27700	Special Screw, Clear Window	2
83	141-2-472T-01201	Lug	5
84	141-2-322T-53000	Shield Plate, AMP	1
85	141-2-322T-53100	Shield Plate, Mechanism	1
88	141-2-453T-20200	Washer, 8.2 x 11 x 0.5mm, Flywheel	1
89	141-2-447T-15200	Cushion	1
90	141-2-521T-10500	Flywheel	1
91	141-2-322T-58500	Shield Plate, Amp	1
HARDWARE			
201		Pan Hd. Screw, 2.6 x 4mm	2
202		Pan Hd. Screw, 2.6 x 6mm	4
203		Pan Hd. Screw, 2.6 x 8mm	6
204		Pan Hd. Screw, 3 x 6mm	2
205		Pan Hd. Screw, 3 x 8mm	6
206		Pan Hd. Screw, 3 x 16mm	8
207		Pan Hd. Tapping Screw, 2.6 x 6mm	1
208		Pan Hd. Tapping Screw, 3 x 6mm	6
209		Pan Hd. Tapping Screw, 3 x 8mm	36
210		Pan Hd. Tapping Screw, 3 x 10mm	3
211		Pan Hd. Tapping Screw, 3 x 16mm	2
212		Pan Hd. Tapping Screw, 3 x 30mm	3
213		Pan Hd. Tapping Screw, 2.6 x 8mm	2
214		Pan Hd. Tapping Screw, 3 x 40mm	9
215		Hexagon Bolt, 2.6 x 16mm	1
216		Hexagon Bolt, 3 x 18mm	8
217		Hexagon Nut, 3mm	9
219		Washer, 3 x 8 x 0.5mm	3
220		Washer, 3 x 13 x 1mm	3
221	141-2-457T-23000	Special Washer, E Ring, 2mm	1
222	141-2-457T-23100	Special Washer	1
223	141-2-457T-23401	Special Washer	1
224		Pan Hd. Tapping Screw W/Washer 3 x 8mm	5
225		Pan Hd. Tapping Screw, W/Washer, 3 x 10mm	1
226		Pan Hd. Tapping Screw, W/Washer, 3 x 12mm	5
227		Pan Hd. Tapping Screw W/Washer, 3 x 14mm	2
228		Pan Hd. Screw 2 x 6mm	2



PARTS LIST

Ref. No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
111	4-151T-31800	Speaker 16cm, Woofer	2
112	4-151T-30000	Speaker 5cm, Tweeter	2
113	4-511T-09271	Meter, VU/Tuning	1
114	4-511T-09272	Meter, VU/Battery	1
115	4-300T-03500	Power Trans	1
116	4-612T-12500	Indicator Lamp, Cassette	1
117	4-153T-10500	Microphone	2
118	4-612T-12600	Indicator Lamp, Dial	1
119	4-231T-76271	Switch, Power	1
120	4-231T-53771	Switch, Dial	1
121		Electrolytic Cap. Nonpolar 4.7μF, 16V (C891, 991)	2
122	4-234T-06171	Fuse 2.5A	1
123	4-231T-51373	Switch, Edit/AMSS	2
124	4-243T-12800	Lead	1
125	4-235T-66300	Socket, Mic	1
126	4-235T-62900	Socket, Speaker	1
127	4-235T-63200	Socket, Edit	1
128	4-235T-66500	Socket, Meter	1
129	4-235T-66600	Socket, Pilot	1
131	4-244T-02600	Rod ANT	2
132	4-235T-56500	Socket, Ext ANT	1
133	4-235T-34600	Socket	8
134	4-231R-14500	Slide Switch, DX-Local	1
135	4-235T-33200	Socket, Voltage	1
136	141-2-382T-03100	Terminal	3
137	4-236T-09905	Plug Assy	1
138	4-235T-33074	Socket, Ext DC	1
139	4-234T-04571	Fuse 160mAT	1
148	4-224T-14400	Variable Capacitor, Fine Tuning	1
TUNER/PRE/SWITCH PCB ASS'Y			
101	141-4-233T-11773	P.C Board Ass'y, Tuner/Pre/ Switch	1
	4-237T-00171	Terminal Board	1
	4-231T-86200	Switch, T/R/P	1
	4-231T-86300	Switch, N/F/CR	3
	4-231T-86500	Switch, Loudness	1
		Transistor 2SC1571	2
		Diode DS442	1
	4-235T-38793	Socket, 6P	1
	4-235T-38797	Socket, 10P	1
	4-235T-65372	Socket, 4P	1
	4-235T-69471	Socket, 6P	1
	4-235T-69473	Socket, 8P	1
	4-235T-70200	Socket, 5P	1
	4-235T-74400	Socket, 5P	1
	4-236T-10200	Plug, 3P	1
	4-236T-10273	Plug, 6P	1
		Diode DS442X	1
RESISTORS			
R830,930		Carbon 680K ohm ±10% ¼W	2
R775		Carbon 22K ohm ±10% ¼W	1
R831,931		Carbon 2.7K ohm ±10% ¼W	2
R829,929		Carbon 22K ohm ±10% ¼W	2
R406,606		Carbon 3.3K ohm ±10% ¼W	2
R832,932		Carbon 470 ohm ±10% ¼W	2
R403,603		Carbon 220 ohm ±10% ¼W	2
R404,604		Carbon 120 ohm ±10% ¼W	2
R749		Carbon 120K ohm ±10% ¼W	1
R869,969		Carbon 82K ohm ±10% ¼W	2
R855,955		Carbon 3.3K ohm ±10% ¼W	2
R761		Carbon 220 ohm ±10% ¼W	1
R724		Metal 180 ohm ±10% ¼W	1
R896,996, 430,897, 997,630		Carbon 8.2K ohm ±10% ¼W	6
R723		Metal 330 ohms ±10% 1W	1
R837,937		Carbon 2.7K ohm ±10% ¼W	2
R725		Metal 47 ohm ±10% 1W	1

Ref. No.	Part No.	Description	Q'ty
TUNER/PRE/SWITCH PCB ASS'Y			
CAPACITORS			
C890,990		Electrolytic 100μF 6.3V	2
C818,918 821,921		Electrolytic 1μF 25V	4
C739		Electrolytic 220μF 16V	1
C729		Electrolytic 4.7μF 16V	1
C826,926		Mylar 0.068μF 50V ±20%	2
C820,920		Ceramic 82pF 50V ±10%	2
VC1~5	4-224T-14300	Variable Capacitor	1
L111A, B,C	4-257T-35901	ANT Coil Ass'y	1
L103	4-257T-33100	ANT Coil	1
CT-1,2, 4,5	4-224R-01400	Trimmer	4
CT-3	4-224R-01400	Trimmer	1
CT-6,9	4-224T-15400	Trimmer	2
CT-7,8	4-224R-01400	Trimmer	2
L101,102	4-265R-11800	VHF Coil	2
L104	4-265R-01300	VHF Coil	1
L105	4-265R-05000	VHF Coil	1
L106	4-265T-51310	VHF Coil, FM OSC	1
L113	4-258T-08340	OSC Coil	1
L114	4-258T-22940	OSC Coil	1
L116	4-258T-14410	OSC Coil	1
L110	4-257T-10731	ANT Coil	1
L108	4-253R-11160	RF Choke Coil 1μH	1
L108	4-253T-10800	RF Choke Coil 1μH	1
L112	4-252T-06500	Low frequency Choke Coil	1
T301	4-256R-20831	IFT	1
T302	4-256R-15131	IFT	1
T303	4-256R-02331	IFT, 455kHz	1
T304,305, 306	4-256R-00131	IFT, 455kHz	3
T307	4-256R-00231	IFT	1
CF301, 302	4-256T-80400	IF Filter	or 2
	4-256T-80471	IF Filter	
	4-256T-80472	IF Filter	
	4-256T-80473	IF Filter	
	4-256T-80474	IF Filter	
SVR301	4-222T-39576	Semifixed Variable Resistor 20K	1
SVR501	4-222T-39575	Semifixed Variable Resistor 10K	1
SVR502	4-222T-39572	Semifixed Variable Resistor 1K	1
CR501, 502	4-227T-02300	CR Pack	2
S101-108	4-238T-04900	Switch, Band Select	1
B102	123-2-471R-10400	Core	1
B101	123-2-471R-10900	Core	1
	141-2-322T-18900	Shield Plate	1
	141-2-322T-18100	Shield Plate	1
Q102,104		Transistor 2SC930 Conv	2
Q101		Transistor FET 2K49	1
Q103		Transistor 2SC930 Conv	1
Q301,302, 303		Transistor 2SC930 IF	3
Q304		Transistor 2SC930 IF	1
Q718		Transistor 2SC536	1
IC501		IC LA3361	1
D102, 101,105, 106,108, 109,301, 302,303, 304,313, 314,316		Diode DS442 X or 1S2473	13
D305,306, 307,308		Diode 1N60 AM	4
D309,310		Diode 1N60 FM1	2
D104		Diode 1S553	1

PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
TUNER/PRE/SWITCH PCB ASS'Y				TUNER/PRE/SWITCH PCB ASS'Y			
D312	CAPACITORS	Diode RD8. 2EB	1	C502	RESISTORS	Mylar 0.047 μ F 20% 50V	1
D311,317		Diode DS442X	4	C504		Electrolytic 1 μ F 50V	1
110,111				C505,506		Electrolytic 0.47 μ F 50V	2
D103		Diode 1N60 FM	1	C507,510		Electrolytic 1 μ F 25V	3
				511			
C107		Ceramic 5pF $\pm$ 0.5pF 50V	1	C501		Electrolytic 2.2 μ F 25V	1
C101		Ceramic 16pF $\pm$ 10% 50V	1	C512		Electrolytic 470 μ F 16V	1
C135		Ceramic 7pF $\pm$ 0.5pF 50V	1	C513		Ceramic 0.022 μ F	1
C106		Ceramic 12pF $\pm$ 10% 50V	1			+80-20%	
C136,137		Ceramic 15pF $\pm$ 10% 50V	2	C747		Electrolytic 100 μ F 25V	1
C132		Ceramic 15pF $\pm$ 10% 50V	1	C748		Electrolytic 220 μ F 25V	1
C118		Ceramic 15pF $\pm$ 10% 50V	1				
C102		Ceramic 20pF $\pm$ 10% 50V	1				
C108		Ceramic 30pF $\pm$ 10% 50V	1	R111		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C152		Ceramic 100pF $\pm$ 10% 50V	1	R123		Carbon 100 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C150,151		Ceramic 5pF $\pm$ 0.5pF 50V	2	R102		Carbon 220 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C115		Ceramic 4pF $\pm$ 0.25pF 50V	1	R119		Carbon 270 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C119		Ceramic 5pF $\pm$ 0.5pF 50V	1	R103		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C113		Ceramic 10pF $\pm$ 10% 50V	1	R109,110		Carbon 1.2K ohm $\pm$ 10% $\frac{1}{4}$ W	2
C123		Ceramic 56pF $\pm$ 5% 50V	1	R120		Carbon 33K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C130		Ceramic 180pF $\pm$ 5% 50V	1	R124		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C117		Ceramic 0.022 μ F +80-20% 50V	1	R105		Carbon 15K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C145		Ceramic 0.01 μ F +80-20% 50V	1	R108		Carbon 15K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C110		Ceramic 8pF $\pm$ 0.5pF 50V	1	R107		Carbon 1.5K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C153		Ceramic 100pF $\pm$ 10% 50V	1	R150		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C126		Ceramic 6pF $\pm$ 0.5pF 50V	1	R127		Carbon 5.6K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C128		Ceramic 10pF $\pm$ 10% 50V	1	R122,121		Carbon 100K ohm $\pm$ 10% $\frac{1}{4}$ W	2
C122		Ceramic 4pF $\pm$ 0.5pF 50V	1	R101		Carbon 470K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C116		Ceramic 100pF $\pm$ 10% 50V	1	R104		Carbon 1.8K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C120		Ceramic 30pF $\pm$ 10% 50V	1	R117		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C104,105,111,142,143,144		Ceramic 0.022 μ F +80-20% 50V	6	R118		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C103		Ceramic 0.01 μ F +80-20% 50V	1	R125		Carbon 5.6 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C109		Ceramic 220pF $\pm$ 20% 50V	1	R129		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C114		Ceramic 0.047 μ F +80-20% 50V	1	R112		Carbon 8.2K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C129		BC Con 0.0047 μ F $\pm$ 20% 25V	1	R114		Carbon 220 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C131		BC Con 0.01 μ F $\pm$ 20% 25V	1	R113		Carbon 1.2K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C121		BC Con 0.01 μ F $\pm$ 20% 25V	1	R151		Carbon 47 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C127		BC Con 0.0022 μ F $\pm$ 20% 25V	1	R117		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C125		Styrol 250pF $\pm$ 5% 50V	1	R337		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C124		Styrol 350pF $\pm$ 5% 50V	1	R340		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C138		Styrol 0.0036 μ F $\pm$ 5% 50V	1	R327		Carbon 3.9K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C317		Ceramic 1pF $\pm$ 0.25pF 50V	1	R325,326		Carbon 5.6K ohm $\pm$ 10% $\frac{1}{4}$ W	2
C303,309		Ceramic 2pF $\pm$ 0.25pF 50V	2	R329		Carbon 6.8K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C315		Ceramic 30pF $\pm$ 10% 50V	1	R330		Carbon 8.2K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C318		Ceramic 30pF $\pm$ 10% 50V N750	1	R309,310		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	2
C322,323,325		Ceramic 220pF $\pm$ 20% 50V	3	R307		Carbon 470K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C341		Ceramic 100pF $\pm$ 10% 50V	1	R314		Carbon 270K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C301		Ceramic 0.001 μ F $\pm$ 20% 50V	1	R319		Carbon 15K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C340,312		Ceramic 0.022 μ F +80-20% 50V	2	R328		Carbon 15K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C335,337,338		Ceramic 0.022 μ F +80-20% 50V	3	R331		Carbon 56K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C305		Ceramic 0.01 μ F +80-20% 50V	1	R332		Carbon 33K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C307		Ceramic 0.01 μ F +80-20% 50V	1	R336		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C316		Ceramic 0.01 μ F +80-20% 50V	1	R335		Carbon 1M ohm $\pm$ 10% $\frac{1}{4}$ W	1
C329,330		Ceramic 0.047 μ F +80-20% 50V	2	R316		Carbon 560 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C302,342		BC Con 0.047 μ F $\pm$ 20% 25V	2	R342		Carbon 820K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C304		BC Con 0.0022 μ F $\pm$ 20% 25V	1	R344		Carbon 56 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C310		BC Con 0.015 μ F $\pm$ 20% 25V	1	R345		Carbon 33K ohm $\pm$ 10% $\frac{1}{4}$ W	1
C319,320,321		BC Con 0.022 μ F $\pm$ 20% 25V	3	R301		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C306		BC Con 0.0047 μ F $\pm$ 20% 25V	1	R302		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C308		BC Con 0.022 μ F $\pm$ 20% 25V	1	R318		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C311		BC Con 0.022 μ F $\pm$ 20% 25V	1	R313		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C333		BC Con 0.01 μ F $\pm$ 20% 25V	1	R341		Carbon 33 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C313		Electrolytic 10 μ F 16V	1	R338		Carbon 220 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C324		Electrolytic 1 μ F 25V	1	R322		Carbon 270 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C332		Electrolytic 1000 μ F 10V	1	R315		Carbon 100 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C331		Electrolytic 47 μ F 6.3V	1	R320		Carbon 330 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C314		Al Electrolytic 0.47 μ F	1	R308		Carbon 220 ohm $\pm$ 10% $\frac{1}{4}$ W	1
		+40 -20% 10V		R311		Carbon 560 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C334		BC Con 0.1 μ F	1	R312		Carbon 560 ohm $\pm$ 10% $\frac{1}{4}$ W	1
		+80 -20% 10V		R304		Carbon 560 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C503		P.P Con 0.001 μ F $\pm$ 5% 50V	1	R303		Carbon 470 ohm $\pm$ 10% $\frac{1}{4}$ W	1
C508,509		BC Con 0.01 μ F $\pm$ 20% 25V	2	R321		Carbon 560 ohm $\pm$ 10% $\frac{1}{4}$ W	1
				R339		Carbon 330 ohm $\pm$ 10% $\frac{1}{4}$ W	1
				R306		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1
				R317		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1
				R323,324		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	2
				R516		Carbon 180 ohm $\pm$ 10% $\frac{1}{4}$ W	1
				R506		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
TUNER/PRE/SWITCH PCB ASS'Y				INPUT SOCKET PCB ASS'Y			
R507		Carbon 1K ohm $\pm 10\%$ $\frac{1}{4}W$	1	105	141-4-233T-13871	P.C Board Ass'y, Input Socket	1
R515		Carbon 1K ohm $\pm 10\%$ $\frac{1}{4}W$	1		4-235T-33300	Socket, DIN	1
R502		Carbon 1K ohm $\pm 10\%$ $\frac{1}{4}W$	1		4-235T-65600	Socket, RCAx2, 1 PHONO	1
R508		Carbon 560 ohm $\pm 10\%$ $\frac{1}{4}W$	1		4-236T-10271	Plug, 4P	1
R513		Carbon 2.7K ohm $\pm 10\%$ $\frac{1}{4}W$	1		4-236T-10272	Plug, 5P	1
R504,505		Carbon 3.3K ohm $\pm 10\%$ $\frac{1}{4}W$	2	Q810,910, 811,911		Transistor 2SC1571	4
R514		Carbon 3.9K ohm $\pm 10\%$ $\frac{1}{4}W$	1	Q817,917		Transistor 2SC536	2
R501		Carbon 6.8K ohm $\pm 10\%$ $\frac{1}{4}W$	1	CAPACITORS			
R503		Carbon 47K ohm $\pm 10\%$ $\frac{1}{4}W$	1	C419,619		Ceramic 470pF $\pm 10\%$ 50V	2
R776		Carbon 1 ohm $\pm 10\%$ $\frac{1}{4}W$	1	C877,977,		Ceramic 47pF $\pm 10\%$ 50V	2
R777		Carbon 5.6K ohm $\pm 10\%$ $\frac{1}{4}W$	1	C873,973		Ceramic 100pF $\pm 10\%$ 50V	2
R778		Carbon 68 ohm $\pm 10\%$ $\frac{1}{4}W$	1	C874,974		Ceramic 180pF $\pm 10\%$ 50V	2
VOLUME PCB ASSY				C805,905		BC Con 0.1 μ F $\pm 20\%$ 25V	2
102	141-4-230T-89671	P.C Board Ass'y, Volume	1	C806,906		BC Con 0.022 μ F $\pm 20\%$ 25V	2
	4-222T-78900	Variable Resistor 50K-B, Volume	1	C875,975		BC Con 0.033 μ F $\pm 20\%$ 25V	2
	4-222T-78400	Variable Resistor 50K-W, Balance	1	C808,908,		Electrolytic 1 μ F 25V	4
	4-222T-78500	Variable Resistor 50K-A, Bass/Treble	2	898,998			
	4-222T-72100	Variable Resistor 10K-A, Input	1	C801,901		Electrolytic 4.7 μ F 25V	2
	4-236T-10293	Plug, 2P	1	C703		Electrolytic 1000 μ F 10V	1
	4-236T-10272	Plug, 5P	1	RESISTORS			
	4-236T-10273	Plug, 6P	1	R882,982		Carbon 22 ohm $\pm 10\%$ $\frac{1}{4}W$	2
Q818,918	4-235T-67500	Socket, 3P	1	R886,986		Carbon 3.3K ohm $\pm 10\%$ $\frac{1}{4}W$	2
		Transistor 2SC536	2	R884,984		Carbon 4.7K ohm $\pm 10\%$ $\frac{1}{4}W$	2
CAPACITORS				R880,980,		Carbon 10K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C401,601		Ceramic 0.0022 μ F $\pm 10\%$ 50V	2	R808,908		Carbon 100K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C412,612		Ceramic 100pF $\pm 10\%$ 50V	2	R885,985		Carbon 27K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C823,923		BC Con 0.01 μ F $\pm 20\%$ 50V	2	R803,903		Carbon 47K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C824,924		BC Con 0.022 μ F $\pm 20\%$ 50V	2	R883,983		Carbon 1M ohm $\pm 10\%$ $\frac{1}{4}W$	2
C822,922		BC Con 0.068 μ F $\pm 20\%$ 50V	2	R825,925		Carbon 22K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C825,925		Electrolytic 0.33 μ F 50V	2	R709		Carbon 1.2K ohm $\pm 10\%$ $\frac{1}{4}W$	1
C899,999		Electrolytic 0.15 μ F 50V	2	R879,979		Carbon 820K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C414,614		Electrolytic 1 μ F 25V	4	R802,902		Carbon 2.2K ohm $\pm 10\%$ $\frac{1}{4}W$	2
416,616				R881,981		Carbon 150 ohm $\pm 10\%$ $\frac{1}{4}W$	2
C415,615		Ceramic 82pF $\pm 10\%$ 50V	2	R418,618		Carbon 8.2K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C752		Electrolytic 47pF 25V	1	R419,619		Carbon 2.2K ohm $\pm 10\%$ $\frac{1}{4}W$	2
RESISTORS				R420,620		Carbon 470K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R835,935		Carbon 10K ohm $\pm 10\%$ $\frac{1}{4}W$	2	AMSS LED PCB ASS'Y			
R878,978		Carbon 1.5K ohm $\pm 10\%$ $\frac{1}{4}W$	2	106	141-4-230T-90000	P.C Board Ass'y, AMSS LED	1
R407,607		Carbon 5.6K ohm $\pm 10\%$ $\frac{1}{4}W$	2		4-235T-34600	Socket	3
R421,621		Carbon 5.6K ohm $\pm 10\%$ $\frac{1}{4}W$	2	D705,706		LED SLP239B, Green	2
R422,622		Carbon 680 ohm $\pm 10\%$ $\frac{1}{4}W$	2	AMSS PCB ASS'Y			
R423,623		Carbon 1.5K ohm $\pm 10\%$ $\frac{1}{4}W$	2	107	141-4-230T-90172	P.C Board Ass'y, AMSS	1
VOLTAGE STABILIZE PCB ASS'Y					4-231T-43072	Switch, FF/REW	2
103	141-4-233T-19400	P.C Board Ass'y, Voltage Stabilize	1		4-231T-51372	Switch, Play/Stop	2
D711		Diode GZA12U	1		4-252T-04700	Choke Coil	1
Q709		Transistor 2SD325	1		4-236T-10571	Plug 4P	1
C746		Ceramic Cap. 0.022 μ F $\pm 80-20\%$ 50V	1	IC703		IC BA 335	1
		Electrolytic Cap. 100 μ F 16V	1	Q707,712, 713,803		Transistor 2SC536	4
C726		Carbon Res. 1 ohm $\pm 10\%$ $\frac{1}{4}W$	1	Q708		Transistor 2SD612	1
R741		Carbon or Solid Res. 180 ohm $\pm 10\%$ $\frac{1}{4}W$	1	Q706		Transistor 2SA608	1
R740				Q710		Transistor 2SD400	1
OUTPUT SOCKET PCB ASS'Y				Q903		Transistor 2SC536 or 2SC945	1
104	141-4-230T-90271	P.C Board Ass'y Input Socket	1	Q703,704		Transistor 2SC536	2
	4-231T-86700	Switch, Speaker 1	1	D717,718		Diode DS442	5
	4-230T-97100	P.C Board, Speaker Switch	1	806,906, 724			
	141-2-382T-11700	Terminal	1	D709,707, 708		Diode 1N4003	3
	4-231T-65200	Switch, Beat Switch	1	D710		Diode GZA13L	1
	4-236T-10293	Plug, 2P	1	D725		Diode GZA8.2L	1
	4-236T-10271	Plug, 4P	1	D726		Diode 1S188AM or 1N60AM	1
	4-236T-10593	Plug, 2P	1				
	4-236T-10572	Plug, 4P	2				
C711		Mylar Cap. 0.033 μ F $\pm 20\%$ 50V	1				

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Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
AMSS PCB ASS'Y				MAIN AMP PCB ASS'Y			
	CAPACITORS			109	141-4-233T-06073	P.C. Board Ass'y, Main AMP	1
C712,713,715		Electrolytic 1 μ F 25V	3	L802,902	4-235T-01600	MPX Coil, Dolby	2
C727		Electrolytic 47 μ F 16V	1	L801,901	4-252T-08300	Choke Coil, 15mH	2
C728,714,743		Electrolytic 100 μ F 16V	3	SVR801,901,802,902	4-252T-03700	Choke Coil	2
C733		Electrolytic 1000 μ F 16V	1	SVR703	4-222T-39575	Semidixed Variable Resistor	2
C705		Electrolytic 33 μ F 16V	1		4-222T-39572	Semidixed Variable Resistor	1
C745		Electrolytic 4.7 μ F 25V +40-20% 16V	1		4-237T-03000	Terminal Board	1
C732		Al Electrolytic 1 μ F +40-20% 16V	1		4-231T-86100	Switch, R/P	1
C717		Al Electrolytic 2.2 μ F +40-20% 16V	1		4-231T-86174	Switch, R/P Muting	1
C718		Al Electrolytic 0.33 μ F $\pm$ 10% 10V	1		4-236T-10200	Plug, 3P	3
C719		Al Electrolytic 4.7 μ F $\pm$ 10% 10V	1		4-236T-10271	Plug, 4P, Mic & P/P Head	2
C749,750		Ceramic 0.022 μ F +80-20% 50V	2		4-236T-10273	Plug, 6P	2
C731		Mylar 0.0047 μ F $\pm$ 10% 50V	1		4-236T-10274	Plug, 7P	1
	RESISTORS				4-236T-10277	Plug, 10P	1
R726		Carbon 56 ohm $\pm$ 10% $\frac{1}{4}$ W	1		4-235T-66800	Socket, 5P	1
R743		Solid 150 ohm $\pm$ 10% $\frac{1}{4}$ W	1		4-235T-67000	Socket, 6P, Vol PCB	1
R727		Carbon 330 ohm $\pm$ 10% $\frac{1}{4}$ W	1		4-235T-70300	Socket, 4P, DIN Input	1
R750		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	1		4-235T-67200	Socket, 6P, Tuner SW PCB	1
R715,735		Carbon 1K ohm $\pm$ 10% $\frac{1}{4}$ W	2		4-235T-64700	Socket, 2P, Output PCB	1
R732,734,729		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	3		4-235T-70400	Socket, 5P, Input PCB	1
R712,713,770		Carbon 4.7K ohm $\pm$ 10% $\frac{1}{4}$ W	3		4-235T-34600	Socket, Tuner SW	1
R731		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	1	IC802,902	IC BA532 S2		2
R745		Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W	1	IC801,902	IC NE646BN		2
R733		Carbon 180K ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q805,905,809,909	Transistor 2SC536		4
R746,747		Carbon 220K ohm $\pm$ 10% $\frac{1}{4}$ W	2	Q815,915,715,711	Transistor 2SC536		4
R728		Carbon 470K ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q801,901,802,902	Transistor 2SC1571		4
R722		Carbon 10 ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q812,912,813,913	Transistor 2SC1571		4
R748		Carbon 820 ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q808,908	Transistor 2SC693		2
R752		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q807,907	Transistor 2SC536		2
R714		Carbon 3.9K ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q714,715,716	Transistor 2SC536		3
R736		Carbon 100 ohm $\pm$ 10% 2W	1	Q816,916	Transistor 2SC536		2
R739		Carbon 1.5K ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q814,914,717	Transistor 2SC536		3
R742		Carbon 3.3 ohm $\pm$ 10% $\frac{1}{4}$ W	1	Q814,914,717	Transistor 2SC945	or	3
R730		Carbon 180 ohm $\pm$ 10% $\frac{1}{4}$ W	1	D701,702,703,704,719,720,721,807,907,722,723,729,801,802,901,902	Diode DS442X		16
R772		Carbon 8.2K ohm $\pm$ 10% $\frac{1}{4}$ W	1	D803,903,804,904	Diode 1S188 AM		4
R771		Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W	1				
DG PCB ASS'Y					RESISTORS		
108	141-4-233T-24001	P.C Board Ass'y, DG	1				
	4-235T-56100	Socket, AC Input	1				
	141-2-135T-44900	Cover	1				
	141-2-381T-04200	Bracket, Fuse	4				
	4-235T-62700	Socket, 4P	1				
		Diode GP20D	4				
D713,714,715,716		Ceramic Cap. 0.047 μ F +80-20% 50V	4	R820,920,875,877,977	Carbon 1M ohm $\pm$ 10% $\frac{1}{4}$ W		5
C720,721,722,723		Ceramic Cap. 0.022 μ F +80-20% 50V	1	R894,994	Carbon 1M ohm $\pm$ 10% $\frac{1}{4}$ W		2
C755				R891,991	Carbon 820K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R887,987	Carbon 680K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R872,972	Carbon 180K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R870,970,858,958	Carbon 270K ohm $\pm$ 10% $\frac{1}{4}$ W		4
				R814,914,864,964	Carbon 220K ohm $\pm$ 10% $\frac{1}{4}$ W		4
				R848,948	Carbon 180K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R857,957,873,973	Carbon 47K ohm $\pm$ 10% $\frac{1}{4}$ W		4
				R892,992	Carbon 22K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R765	Carbon 15K ohm $\pm$ 10% $\frac{1}{4}$ W		1
				R823,923,860,862,821,921	Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W		6
				R402,602	Carbon 8.2K ohm $\pm$ 10% $\frac{1}{4}$ W		2
				R845,945,853	Carbon 5.6K ohm $\pm$ 10% $\frac{1}{4}$ W		3

PARTS LIST

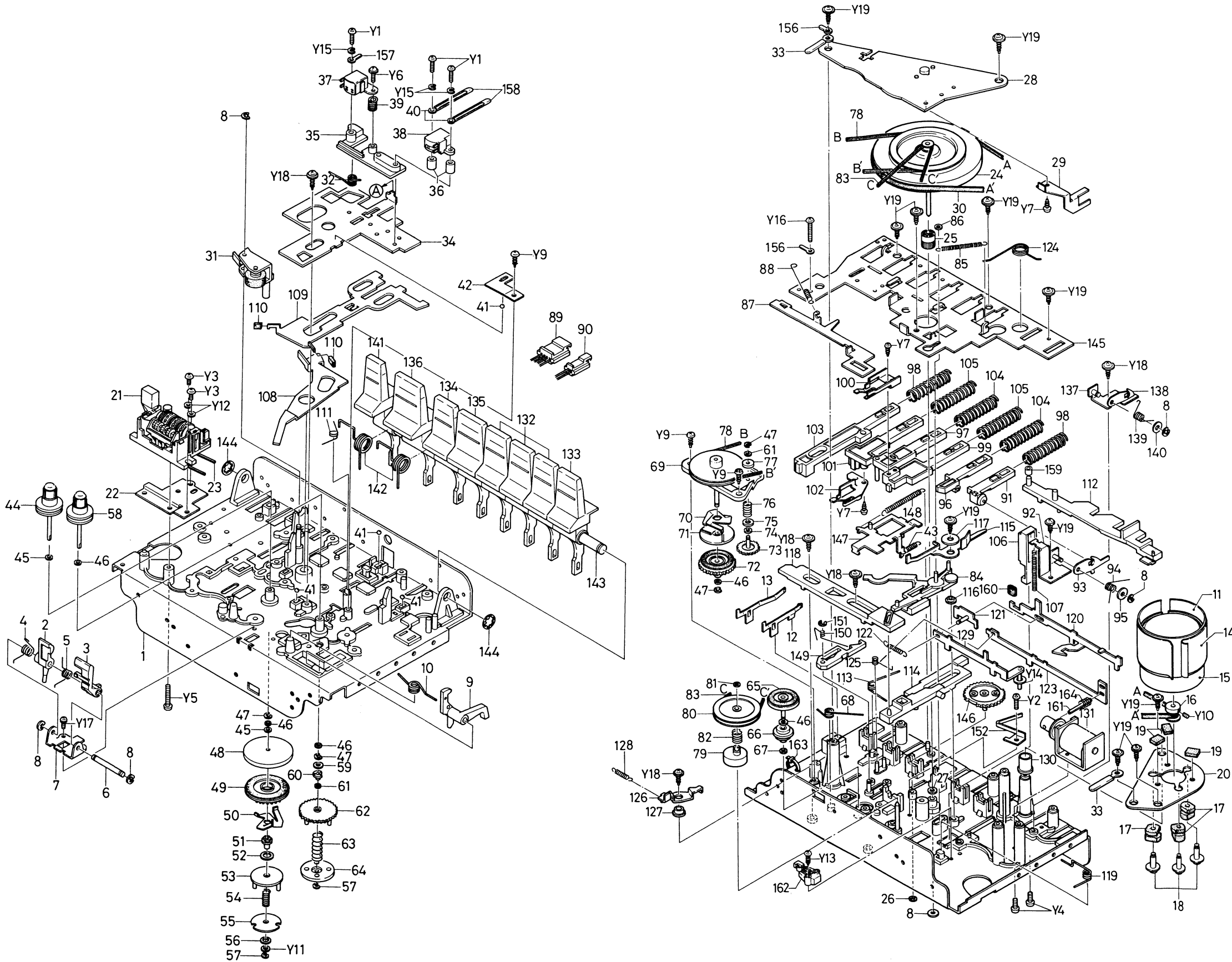
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
MAIN AMP PCB ASS'Y							
R707,708, 846,946		Carbon 4.7K ohm $\pm 10\% \frac{1}{4}W$	4	C834,934		Electrolytic 470 μF 16V	2
R701		Carbon 8.2K ohm $\pm 10\% \frac{1}{4}W$	1	C836,936		Electrolytic 220 μF 25V	2
R768,769		Carbon 4.7K ohm $\pm 10\% \frac{1}{4}W$	2	C740,813, 913,810, 910,852, 952		Electrolytic 220 μF 16V	7
R417,617		Carbon 3.3K ohm $\pm 10\% \frac{1}{4}W$	2	C872,972		Electrolytic 220 μF 16V	6
R962,756, 960		Carbon 10K ohm $\pm 10\% \frac{1}{4}W$	3	867,967, 837,737			
R890,990		Carbon 6.8K ohm $\pm 10\% \frac{1}{4}W$	2	C736		Electrolytic 100 μF 16V	1
R847,947, 850,950, 834,934		Carbon 6.8K ohm $\pm 10\% \frac{1}{4}W$	6	C832,932		Electrolytic 47 μF 10V	2
R851,951		Carbon 3.3K ohm $\pm 10\% \frac{1}{4}W$	2	C830,930		Electrolytic 10 μF 16V	2
R801,901, 867,967		Carbon 2.2K ohm $\pm 10\% \frac{1}{4}W$	4	C814,914, 887,987, 869,969, 897,997, 741		Electrolytic 4.7 μF 25V	9
R774,601, 815,915, 755		Carbon 1.5K ohm $\pm 10\% \frac{1}{4}W$	5	C702		Electrolytic 4.7 μF 16V	1
R868,968, R859,959		Carbon 1.2K ohm $\pm 10\% \frac{1}{4}W$	2	C849,949, 844,944, 807,907		Electrolytic 1 μF 25V	6
R754,706, 833,933, 852,952		Carbon 1.5K ohm $\pm 10\% \frac{1}{4}W$	2	C850,950, 854,954, 856,956		Electrolytic 1 μF 25V	6
R865,965		Carbon 1K ohm $\pm 10\% \frac{1}{4}W$	2	C880,980		Electrolytic 1 μF 25V	2
R843,943, 898,998, 828,928		Carbon 820 ohm $\pm 10\% \frac{1}{4}W$	6	C863,963, 859,959		Electrolytic 10 μF 16V	4
R822,922, 849		Carbon 560 ohm $\pm 10\% \frac{1}{4}W$	3	C744		Electrolytic 47 μF 16V	1
R863,963, 888,988		Carbon 330 ohm $\pm 10\% \frac{1}{4}W$	4	C704		Electrolytic 22 μF 10V	1
R874		Carbon 180 ohm $\pm 10\% \frac{1}{4}W$	1	C701		Electrolytic 47 μF 10V	1
R842,942		Carbon 100 ohm $\pm 10\% \frac{1}{4}W$	2	C827,927		Electrolytic 0.47 μF 50V	2
R710,711		Carbon 6.8K ohm $\pm 10\% \frac{1}{4}W$	2	C853,953, 858,958, 892,992		Electrolytic 0.1 μF 50V	6
R893,993, 866,966		Carbon 56 ohm $\pm 10\% \frac{1}{4}W$	4	C817,917, 893,993		Al Electrolytic 0.1 μF +40-20% 16V	4
R895,995		Carbon 22 ohm $\pm 10\% \frac{1}{4}W$	2	C855,955		Al Electrolytic 0.22 μF 16V	2
R975		Carbon 1M ohm $\pm 10\% \frac{1}{4}W$	1	C857,957		Electrolytic 0.33 μF 50V	2
R738		Carbon 68 ohm $\pm 10\% 1W$	1	C871,971		Mylar 0.15 μF $\pm 20\%$ 50V	2
R758		Carbon 270 ohm $\pm 10\% \frac{1}{4}W$	1	C833,933		Mylar 0.1 μF $\pm 20\%$ 50V	2
R827,927		Carbon 15K ohm $\pm 10\% \frac{1}{4}W$	2	C860,960		Mylar 0.047 μF $\pm 5\%$ 50V	2
R702		Carbon 5.6K ohm $\pm 10\% \frac{1}{4}W$	1	C862,962		Mylar 0.027 μF $\pm 5\%$ 50V	2
R953		Carbon 5.6K ohm $\pm 10\% \frac{1}{4}W$	1	C847,947		Mylar 0.022 μF $\pm 5\%$ 50V	2
R401		Carbon 1.5K ohm $\pm 10\% \frac{1}{4}W$	1	C845,945		Mylar 0.018 μF $\pm 20\%$ 50V	2
R753		Carbon 1.8K ohm $\pm 10\% \frac{1}{4}W$	1	C888,988		Mylar 0.0068 μF $\pm 20\%$ 50V	2
R763		Carbon 10 ohm $\pm 10\% \frac{1}{4}W$	1	C864,964		Mylar 0.0056 μF $\pm 5\%$ 50V	2
R889,989, 876,976		Carbon 3.3K ohm $\pm 10\% \frac{1}{4}W$	4	C865,965		Mylar 0.0047 μF $\pm 5\%$ 50V	2
R762		Carbon 330K ohm $\pm 10\% \frac{1}{4}W$	1	C848,948		Ceramic 470pF $\pm 10\%$ 50V	2
R760		Carbon 220 ohm $\pm 10\% \frac{1}{4}W$	1	C851,951, 884,984		Ceramic 390pF $\pm 10\%$ 50V	4
R974		Carbon 180 ohm $\pm 10\% \frac{1}{4}W$	1	C866,966		Mylar 0.001 μF $\pm 5\%$ 50V	2
R766		Carbon 220 ohm $\pm 10\% \frac{1}{4}W$	1	C839,939		Electrolytic 1 μF 50V	2
R767		Carbon 10 ohm $\pm 10\% \frac{1}{4}W$	1	OSC PCB ASS'Y			
R757		Carbon 18K ohm $\pm 10\% \frac{1}{4}W$	1	110	141-4-233T-84600	P.C. Board Ass'y, OSC	1
R408,608		Carbon 1K ohm $\pm 10\% \frac{1}{4}W$	2	SVR701, 702	4-258T-26700	OSC Coil, Bias	1
R409,609		Carbon 100 ohm $\pm 10\% \frac{1}{4}W$	2		4-222T-81478	Semifixed Variable Resistor	2
R414,614, 415,615		Carbon 1K ohm $\pm 10\% \frac{1}{4}W$	4		4-236T-10293	Plug, 2P	1
CAPACITORS					4-235T-64400	Socket, 2P	1
C846,946		Ceramic 390pF $\pm 10\%$ 50V	2		4-253T-01014	H.F Choke Coil	1
C895,995		Ceramic 330pF $\pm 10\%$ 50V	2	Q721,722		Transistor 2SC536	2
C831,931		Ceramic 150pF $\pm 10\%$ 50V	2	Q720		Transistor 2SA608	1
C838,938, 861,961		Ceramic 220pF $\pm 10\%$ 50V	4	C709,710		Ceramic Cap. 220pF $\pm 10\%$ 50V	2
C882,982 816,916, 879,979		Ceramic 180pF $\pm 10\%$ 50V	6	C760		Electrolytic 10 μF 16V	1
C808,908, 894,994		Ceramic 82pF $\pm 10\%$ 50V	4	C761		BC Con 0.015 μF $\pm 10\%$ 25V	1
C883,983		Ceramic 47pF $\pm 10\%$ 50V	2	C762,763		Ceramic 0.0033 μF $\pm 10\%$ 50V	2
C403,603, 418,618		Ceramic 0.001 μF $\pm 10\%$ 50V	4	C764		Ceramic 0.0047 μF $\pm 10\%$ 50V	1
C751		Ceramic 0.022 μF +80-20% 50V	1	C765		Mylar 0.018 μF $\pm 5\%$ 50V	1
C881,981, 896,996		Ceramic 100pF $\pm 10\%$ 50V	4	R722		Carbon 560 ohm $\pm 10\% \frac{1}{4}W$	1
C815,915		Ceramic 22pF $\pm 10\%$ 50V	2	R780		Carbon 27K ohm $\pm 10\% \frac{1}{4}W$	1
C417,617		Ceramic 0.0047 μF $\pm 10\%$ 50V	2	R781		Carbon 4.7 ohm $\pm 10\% \frac{1}{4}W$	1
C725,730		Electrolytic 3300 μF 25V	2	R782		Carbon 12K ohm $\pm 10\% \frac{1}{4}W$	1
C835,935		Electrolytic 1000 μF 16V	2				

PARTS LIST

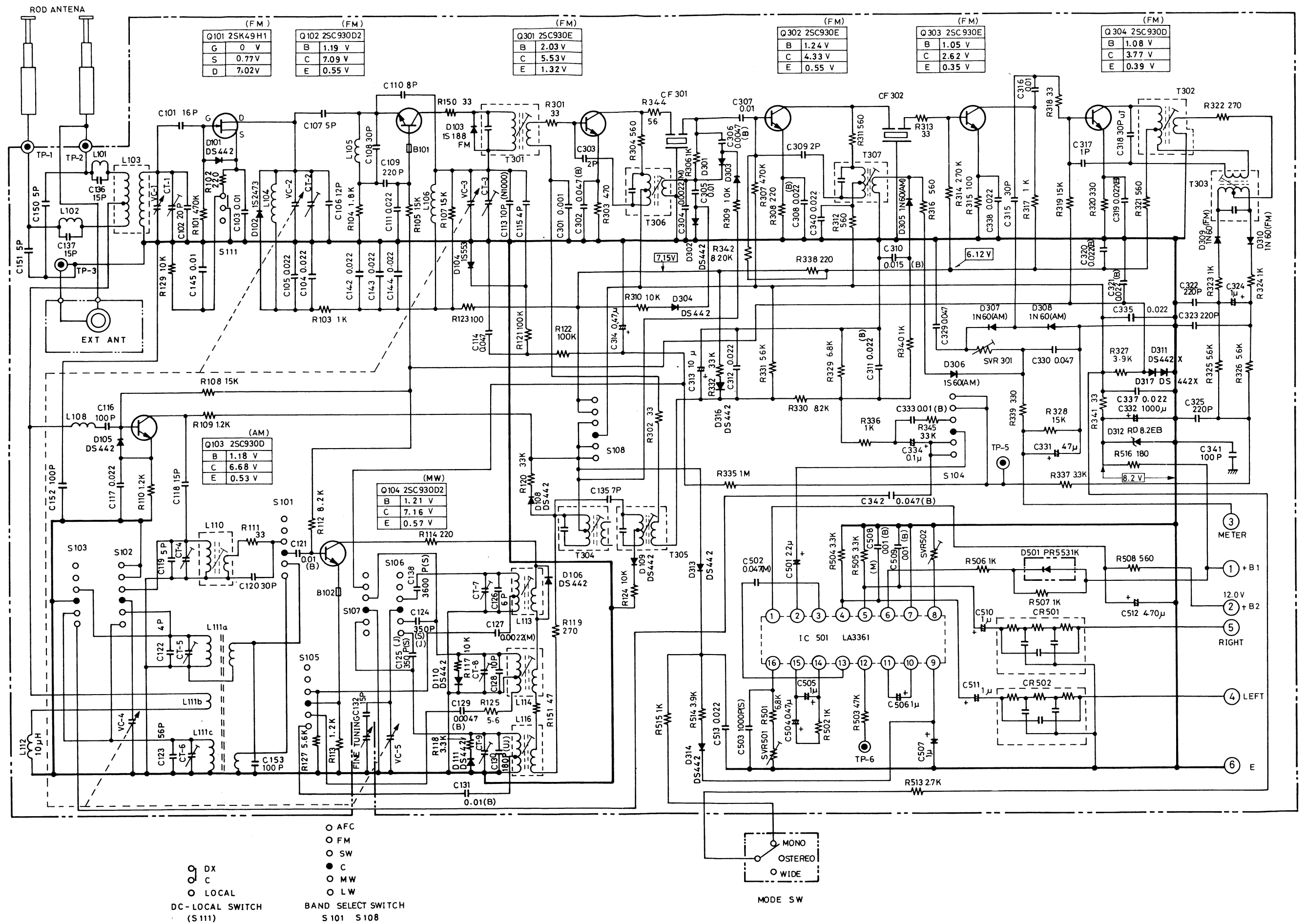
Ref. No.	Part No.	Description	Q'ty
LED PCB ASS'Y			
130 D501,712, 727	141-4-233T-15700	P.C Board Ass'y, LED LED PR5531K RE	1
	4-235T-34600	Socket	3
			2
SOCKET PCB ASSY			
149 R818,918 R720,721 R424,624 C811,812 911,912	141-4-230T-89771	P.C. Board Ass'y, Socket	1
	4-235T-60600	Socket, Headphone	1
	4-235T-60700	Socket, Mic 3.5φ with Mic	1
	123-2411R-10900	Plate Nut, Remote	1
	4-235T-60800	Socket, Mic 3.5φ	1
	4-235R-15700	Socket, Remote 2.5φ	1
	4-235T-63300	Socket 3P, AMP PCB	1
	4-235T-66700	Socket 7P, AMP PCB	1
	4-235T-64600	Socket 2P, Output PCB	1
		Carbon Res. 1.5K ohm ±10% ¼W	2
		Solid Res. 100 ohm ±10% ½W	2
		Carbon Res. 1.5K ohm ±10% ¼W	2
		Electrolytic 0.1μF ±20% 50WV	4
MECHANISM			
1	141-0-311T-31120	Chassis Ass'y	1
2	141-2-742T-25800	Lever	1
3	141-2-742T-18300	Lever	1
4	141-2-852T-47300	Spring Wire	1
5	141-2-852T-48400	Spring Wire	1
6	141-2-753T-41400	Shaft	1
7	141-2-747T-16400	Bracket, Lever	1
8	141-2-457T-23000	Special Washer	5
9	141-2-742T-14500	Lever	1
10	141-2-852T-47200	Spring Wire	1
11	141-2-322T-27100	Shield Plate	1
12	141-0-853T-48603	Spring Plate Ass'y	1
13	141-0-853T-48502	Spring Plate Ass'y	1
14	141-2-184T-03000	Tape	1
15	4-527T-13000	Motor	1
16	141-2-661T-72700	Pully, Motor	1
	141-2-661T-72701	Pully, Motor } or	
	141-2-661T-72702	Pully, Motor	
17	141-2-445T-11801	Rubber Cushion, Motor	3
18	141-2-421T-27500	Special Screw, Motor	3
19	141-2-447T-36001	Cushion, Motor	3
20	141-2-378T-09900	Bracket, Motor	1
21	141-2-811T-06900	Counter	1
22	141-2-812T-08000	Bracket, Counter	1
23	141-2-564T-19100	Square Belt, Counter	1
24	141-0-521T-09700	Flywheel Ass'y	1
25	141-2-581T-15400	Gear	1
26	141-2-457T-04300	Special Washer	1
27	141-2-453T-30200	Washer, 2.6 x 4.7 x 0.13mm, Nylon	1
	141-2-453T-30201	Washer, 2.6 x 4.7 x 0.13mm, Nylon	
	141-2-453T-30202	Washer, 2.6 x 4.7 x 0.13mm, Nylon	
28	141-0-524T-07903	Bracket, Flywheel Ass'y	1
29	141-2-351T-48800	Bracket	1
30	141-2-561T-04501	Flat Belt, Main	1
31	141-0-545T-05800	Lever, Pinch Roller Ass'y	1
32	141-2-852T-47400	Spring Wire	1
33	141-2-472T-01201	Lug	2
34	141-2-731T-69300	Slide, Head	1
35	141-2-464T-32000	Fixer	1
36	141-2-462T-55800	Boss	2
37	4-242T-24671	Head, R/P	1
38	4-242T-26300	Head, E	1
39	141-2-851T-82700	Spring Coil	1
40	141-2-472T-05900	Lug	2
41	141-2-345T-00400	Steel Ball	4
42	141-2-853T-54900	Spring Plate	1
43	141-2-855T-38000	Spring Coil	1
44	141-0-531T-12200	Reel Plate Ass'y, Tackup	1
45	141-2-453T-30100	Washer, 2.1 x 4 x 0.13mm, Nylon	1
46	141-2-453T-30101	Washer, 2.1 x 4 x 0.25mm, Nylon	7
47	141-2-457T-23800	Special Washer	4

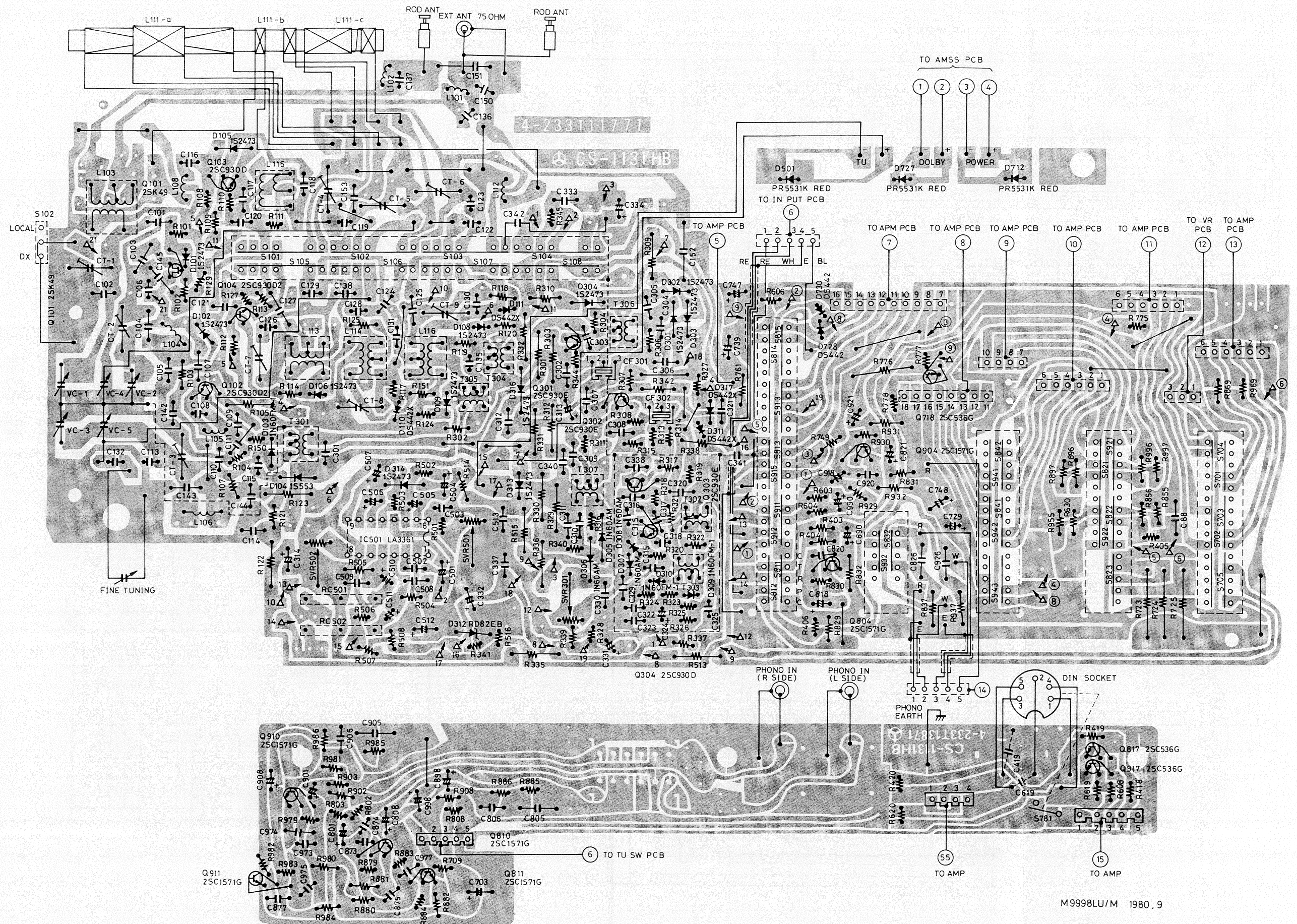
Ref. No.	Part No.	Description	Q'ty
MECHANISM			
48	141-2-547T-02100	Roller	1
49	141-0-581T-15000	Gear Ass'y	1
50	141-2-853T-54500	Spring Plate	1
51	141-2-457T-13300	Special Washer	1
52	141-2-453T-30500	Washer, 4.1 x 6.5 x 0.13mm, Nylon	1
53	141-2-671T-05500	Cum	1
54	141-2-855T-23500	Spring Coil	1
55	141-2-457T-13000	Special Washer	1
56	141-2-453T-30500	Washer, 4.1 x 6.5 x 0.13mm, Nylon	1
57	141-2-457T-23700	Special Washer	2
58	141-0-531T-12201	Reel Plate Ass'y, Supply	1
59	141-2-457T-06200	Special Washer	1
60	141-2-661T-74000	Pully, REW	1
61	141-2-457T-10200	Special Washer	2
62	141-2-581T-10700	Gear, REW	1
63	141-2-855T-65500	Spring Coil	1
64	141-2-661T-26500	Pulley	1
65	141-0-551T-01720	Idler Ass'y	1
66	141-2-661T-26600	Pulley	1
67	141-2-453T-31600	Washer, 1.6 x 4 x 0.25mm	1
68	141-2-852T-47800	Spring Wire	1
69	141-0-351T-48300	Bracket Mounting Ass'y	1
70	141-2-853T-54401	Spring Plate	1
71	141-2-457T-13100	Special Washer	1
72	141-0-581T-10400	Gear Ass'y, FF/REW	1
73	141-0-581T-10500	Gear Ass'y, FF	1
74	141-2-457T-11000	Special Washer, 0.25t	2
75	141-2-457T-14000	Special Washer, 0.2t	1
76	141-2-855T-23400	Spring Coil	1
77	141-2-457T-13600	Special Washer	1
78	141-2-564T-20600	Square Belt, Pulley	1
79	141-2-671T-05600	Cum	1
80	141-2-661T-26400	Pulley	1
81	141-2-453T-31600	Washer, 1.6 x 4 x 0.25mm	1
82	141-2-855T-30300	Spring Coil	1
83	141-2-564T-18400	Square Belt, Auto Stop	1
84	141-0-742T-14101	Lever Ass'y	1
85	141-2-855T-23101	Spring Coil	1
86	141-2-457T-14300	Special Washer	1
87	141-2-742T-13900	Lever	1
88	141-2-855T-26300	Spring Coil	1
89	4-235T-62101	Socket, R/P Head	1
90	4-235T-62201	Socket, E Head	1
91	141-0-731T-71800	Slide Ass'y	1
92	141-0-747T-17200	Bracket Lever Ass'y	1
93	141-2-742T-13800	Lever	1
94	141-2-852T-47700	Spring Wire	1
95	141-2-453T-00800	Washer, 3 x 8 x 0.5mm	1
96	141-2-731T-59100	Slide, Stop Button	1
97	141-0-731T-69000	Slide Ass'y, Play Button	1
98	141-2-855T-29500	Spring Coil	2
99	141-2-731T-68900	Slide, FF	1
100	141-2-853T-61600	Spring Plate	1
101	141-2-731T-69100	Slide, REW Button	1
102	141-2-853T-61700	Spring Plate	1
103	141-2-731T-69200	Slide, REC Button	1
104	141-2-855T-23000	Spring Coil	1
105	141-2-855T-37200	Spring Coil	1
106	141-2-731T-64300	Slide, Eject	1
107	141-2-855T-30200	Spring Coil	1
108	141-2-742T-29700	Lever	1
109	141-2-731T-65600	Slide	1
110	141-2-712T-02700	Brake Shoe	2
111	141-2-852T-49000	Spring Wire	1
112	141-2-742T-26100	Lever	1
113	141-2-852T-55500	Spring Wire	1
114	141-2-731T-59200	Slide	1
115	141-2-853T-54600	Spring Plate	1
116	141-2-683T-34200	Ring	1
117	141-2-457T-33400	Special Washer	1
118	141-2-731T-59301	Slide	1
119	141-2-852T-47600	Spring Wire	1
120	141-2-731T-69700	Slide	1
121	141-0-731T-69400	Slide Ass'y	1
122	141-2-855T-49400	Spring Coil	1
123	141-2-731T-69500	Slide	1
124	141-2-853T-54300	Spring wire	1
125	141-2-852T-54400	Spring Wire	1
126	141-2-742T-31700	Lever	1
127	141-2-683T-36600	Ring	1
128	141-2-855T-49600	Spring Coil	1

Ref. No.	Part No.	Description	Q'ty
MECHANISM			
129	141-0-731T-69600	Slide Ass'y	1
130	141-2-461T-34600	Pipe	1
131	4-264T-07601	Magnetic Coil	1
132	141-2-611T-12700	Lever, Push Button Play/REW/FF	3
133	141-2-611T-12701	Lever, Push Button REC	1
134	141-2-611T-12800	Lever, Push Button PAUSE	1
135	141-2-611T-12900	Lever, Push Button Stop, Eject	1
136	141-0-611T-13000	Lever, Push Button PSF	1
137	141-0-747T-17800	Bracket, Lever	1
138	141-2-742T-29800	Lever	1
139	141-2-852T-55300	Spring Wire	1
140	141-2-453T-00800	Washer, 3 x 8 x 0.5mm	1
141	141-2-611T-13100	Lever, Push Button Edit	1
142	141-2-852T-54200	Spring Wire	2
143	141-2-753T-57600	Shaft	1
144	141-2-457T-20300	Special Washer	2
145	141-2-737T-06700	Bracket, Slide	1
146	141-0-581T-11900	Gear Ass'y	1
147	141-0-731T-61000	Slide Ass'y	1
148	141-2-855T-25300	Spring Coil	1
149	141-2-742T-19600	Lever	1
150	141-2-852T-48900	Spring Wire	1
151	141-2-453T-30001	Washer, 1.7 x 3.2 x 0.25mm, Nylon	1
152	141-2-853T-56800	Spring Plate	1
156	123-2-472R-00400	Lug	2
157	123-2-472R-00200	Lug	1
158	141-2-490T-00600	Tube	1
159	141-2-490T-08301	Tube	5
160	141-2-490T-08000	Tube	3
161	141-2-488T-19000	Pin	1
162	4-231T-78500	Switch	1
163	141-2-464T-20600	Fixer	1
164	141-2-855T-39100	Spring Coil	1
MECHANISM HARDWARE			
Y1		Pan Hd. Screw, 2 x 10mm	3
Y2		Pan Hd. Screw, 2.6 x 4mm	1
Y3		Pan Hd. Screw, 2.6 x 6mm	2
Y4		Pan Hd. Screw, 3 x 4mm	2
Y5		Pan Hd. Screw, 3 x 16mm	1
Y6		Pan Hd. Screw, W/Washer, 2 x 10mm	1
Y7		Pan Hd. Tapping Screw, 2.3 x 6mm	3
Y9		Binding Hd. Tapping Screw, 3 x 6mm	3
Y10		Headless Screw, 2 x 4mm	1
Y11		Washer, 2 x 6 x 0.4mm	1
Y12		Washer, 2.6 x 5 x 0.5mm	2
Y13		Pan Hd. Tapping Screw, 2.3 x 10mm	1
Y15		Spring Washer, 2 x 4.4 x 0.5mm	3
Y16		Pan Hd. Forming Screw, 3 x 18mm	1
Y17		Pan Hd. Screw W/Sping Washer, 2.6 x 4mm	2
Y18		Pan Hd. Tapping W/Washer, 3 x 6mm	4
Y19		Pan Hd. Tapping W/Washer, 3 x 8mm	11
Y14		Washer 4 x 8 x 0.5mm	1



SCHEMATIC DIAGRAM

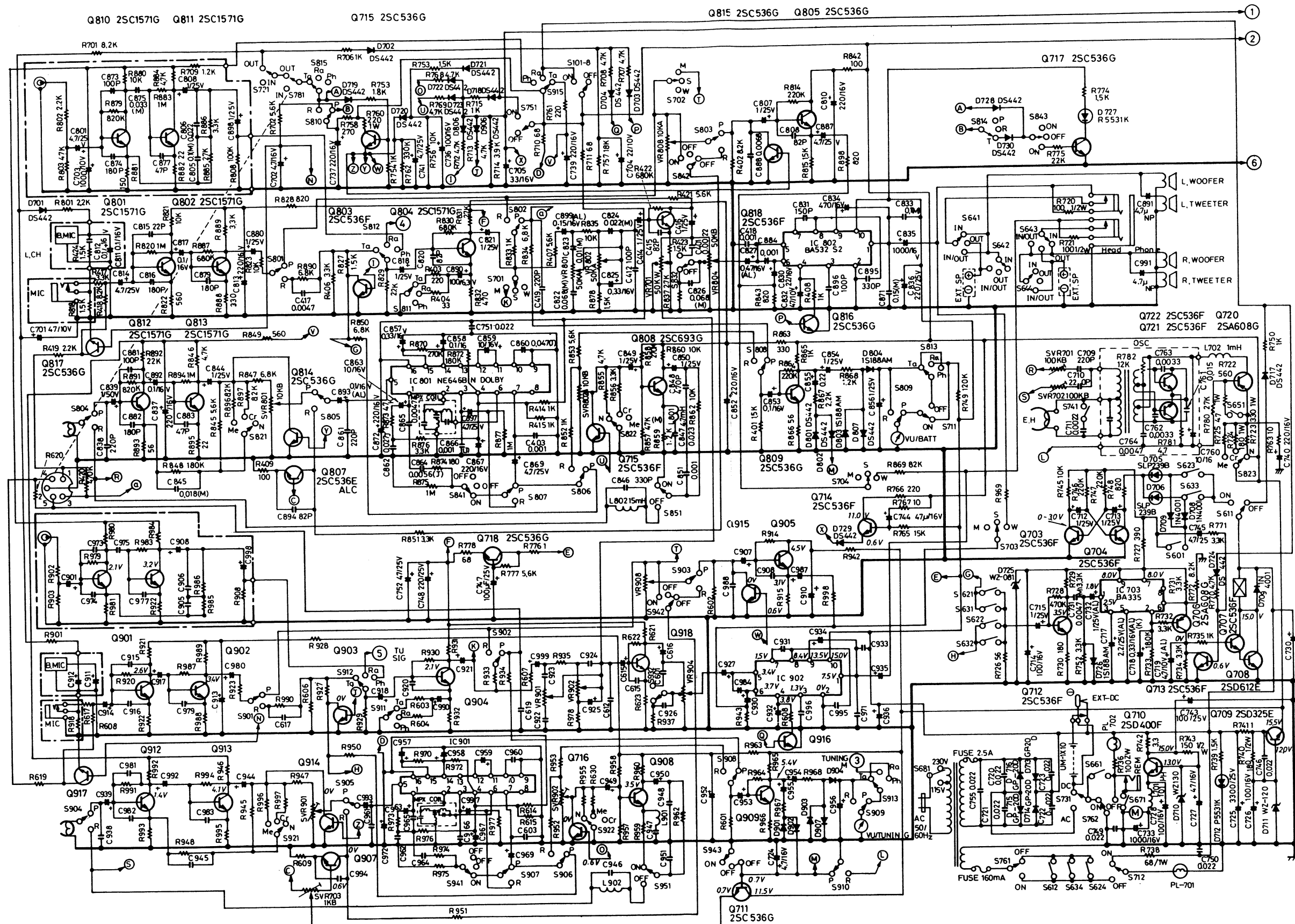




M 9998LU/M 1980.9

M9998 / LU 1979.7

SCHEMATIC DIAGRAM



- S601 AMSS SWITCH
- S611 ~ S612 PLAY SWITCH
- S621 ~ S624 FAST FORWARD SWITCH
- S631 ~ S634 REWIND SWITCH
- S641 ~ S644 SPEAKER SWITCH
- S651 STOP MUTING SWITCH
- S661 MECHANISM SWITCH
- S671 MOTOR SWITCH
- S681 VOLTAGE SELECT SWITCH
- S701 ~ S704 MONO/STEREO/WIDE SWITCH
- S711 ~ S712 PLAMP/ BATTERY SWITCH
- S721 MIC SWITCH
- S731 AC/DC SWITCH
- S741 BEAT CANCEL SWITCH
- S751 MUTING SWITCH
- S761 ~ S762 POWER SWITCH
- S781 DIN SWITCH
- S801 ~ S810 RECORD / PLAY SWITCH
- S901 ~ S910 TAPE / RADIO / PHNO SWITCH
- S911 ~ S915 TAPE SELECT SWITCH
- S921 ~ S922 TAPE SELECT SWITCH
- S931 ~ S932 LOUDNESS SWITCH
- S931 ~ S932 PHONO / LINE SWITCH
- S841 ~ S842 DOLBY ON/OFF SWITCH
- S941 ~ S943 ALC ON/OFF SWITCH
- S851, S951 EDIT SWITCH

